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**Business Operating Plan of the  
Puvurnaq Power Company  
Electric Utility Upgrade**

**JUNE 1, 2002**

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**Puvurnaq Power Company  
Native Village of Kongiganak**

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## ADDITIONAL RELATED AND ATTACHED DOCUMENTS

1. SECONDARY OPERATOR AGREEMENT
2. SITE CONTROL DOCUMENTS
3. GRANT AGREEMENT
4. R&R FUND ACCOUNT – SAMPLE DOCUMENTS
5. INSURANCE QUOTE

SEE BACK  
COVER FOR  
CD VERSION  
OF THIS  
PLAN.

## **I. EXECUTIVE SUMMARY**

This Business Operating Plan (the “Plan”) provides a guideline for the Native Village of Kongiganak’s maintenance, operation and sustainability of the Kongiganak Electric Utility Upgrade (the “Facility”).

The Native Village of Kongiganak, operating as Puvurnaq Power Company, will be responsible to operate and sustain the newly installed Facility and associated electric power generation equipment. This plan has been developed to assist the Native Village of Kongiganak with that effort and estimates the minimum resources required to sustain the Facility; however, this plan does not include discretionary expenses that may be incurred by the Primary Operator, which are not required for the primary function of electric power generation and distribution. For the new Facility, the plan includes minimum estimates of operation and maintenance needs and costs, renewal and replacement needs and costs, a per kilowatt hour (KwH) surcharge for residential and commercial users, and total electrical costs. For the Utility, *Table A: 40 Year Estimated Utility Net Income and Cashflow* includes projections of utility revenues and expenses with resulting annual net income and cashflow as well as the estimated retail price per kilowatt hour.

The Rural Power System Upgrade Program will construct a New Electric Power Generation Facility in Kongiganak that will consist of four diesel engine generators, automated switchgear, fuel handling, and a step-up transformer bank.

The Facility will be turned over to the Primary Operator after the satisfactory completion, as determined by AEA or its representative, of a 14-day test period. After this test period, AEA will provide written notice (Certificate of Substantial Completion) stating that the Facility is ready for Beneficial Occupancy. Upon receipt of this Certificate, the Native Village of Kongiganak will become the Primary Operator and will assume responsibility for the use, day-to-day operations, and long-term maintenance of all Facility components, except those noted elsewhere in the plan. When the Project has been completed (the Facility is complete, crews have demobilized, invoices have been paid and there are no outstanding issues), the AEA will issue, through its Grants Manager, a Notice of Project Completion.

### **Document Interrelationships**

The Business Operating Plan is a plan, not an agreement. Attached to this Plan are four documents:

- Secondary Operator Agreement
- Site Control Documents
- Grant Agreement
- R&R Fund Account – Sample Documents

The Secondary Operator Agreement references the Plan, and includes language requiring the plan be followed. Acceptance of the Plan by execution of the Secondary Operator Agreement is pre-requisite to funding from the Denali Commission (the “Commission”).

## II. BACKGROUND

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The Denali Commission was established by the Federal Government to fund improvement projects within the State of Alaska, including the Rural Power System Upgrade Program. The Alaska Energy Authority is a state-owned corporation that assists in the development of safe, reliable, and environmentally sound energy systems for Alaska's communities. AEA will coordinate the planning, construction and funding of the Kongiganak Electric Utility Upgrade Project, which is to be partially funded by the Commission.

The village of Kongiganak is located in southwest Alaska on the western shore of Kuskokwim Bay, west of the mouth of the Kuskokwim River. Kongiganak lies 70 miles southwest of Bethel and approximately 451 miles west of Anchorage. Transportation to the Kongiganak is by air or water, and a 3,000-foot gravel airstrip is owned and maintained by the State of Alaska, Department of Transportation and Public Facilities. The airstrip is also shared with nearby village of Kwigillingok.

The population of Kongiganak is predominantly Yup'ik Eskimo, and was settled in the late 1960's by former residents of Kwigillingok, who were seeking higher ground to escape periodic flooding. Since that time, population has steadily increased. The economy of the area is primarily focused on subsistence activities. Approximately one half of the employment is with the school, and village government, stores, or commercial fishing provide the remaining employment. Residents must haul both fresh water and waste. Water is treated at the local washeteria and hauled to individual houses from there. Initial upgrades have been made to the water/wastewater system, and funds have been requested for the construction of a circulating water and sewer utilidor system. The Native Village of Kongiganak provides most utility services; it owns and operates the washeteria, health clinic and electric utility (the Puvurna Power Company), and others. Qemirtalek Coast Corporation, the local Village Corporation, owns and operates the local cable utility.

Selected demographic and historical data for the community is provided below:

### *Selected Statistics – (Kongiganak)*

<b>Population</b>	
2000	359
1990	294
1980	239
1970	190
1960	0
1950	0
<b>Housing (2000 Data)</b>	
Occupied Housing	79
Vacant Housing Due to Seasonal Use	1
Other Vacant Housing	10
<b>Economic Data (1990 Data)</b>	
Unemployment Rate	16.3
Median Household Income	\$33,250

### **III. FACILITY UPGRADE**

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The Rural Power System Upgrade Program will construct a new Electric Power Generation Facility in Kongiganak that will consist of four diesel engine generators, automated switchgear, fuel handling, and a step-up transformer bank.

#### **Electric Utility Upgrade Description**

The AEA contracted with LCMF, Inc. to develop a Conceptual Design Report (CDR), which was submitted to AEA on March 7, 2002. The purpose of the CDR is to provide a concept design and construction cost estimate for upgrades to the electrical generation system for the community of Kongiganak. This Plan is predicated upon the information contained in the CDR and its acceptance by the community.

The preliminary construction estimate for the Facility, as developed in the CDR, is approximately \$2,100,000.

The new Electric Power Generation Facility will be located adjacent to and overlapping the existing powerhouse. The site is adjacent to the washeteria, water treatment plant and water tank, and therefore, waste heat can be recovered for use at these facilities. The Facility will consist of four diesel engine generators, automated switchgear, fuel handling, and a step-up transformer bank.

#### **Project Exclusions**

Neither AEA nor the Commission will take responsibility for the following, which are not a part of this project:

- Off-site fuel storage
- Abandonment or decommissioning of existing facilities
- Environmental cleanup

The AEA and the Commission will not provide any guarantees, warranties or ongoing support, other than that which is defined in the Plan. However, manufacturer warranties will be transferred at the time of project turnover (defined in *Section IV. Primary Operator*).

#### **Electric Power Generation Facility Capacity**

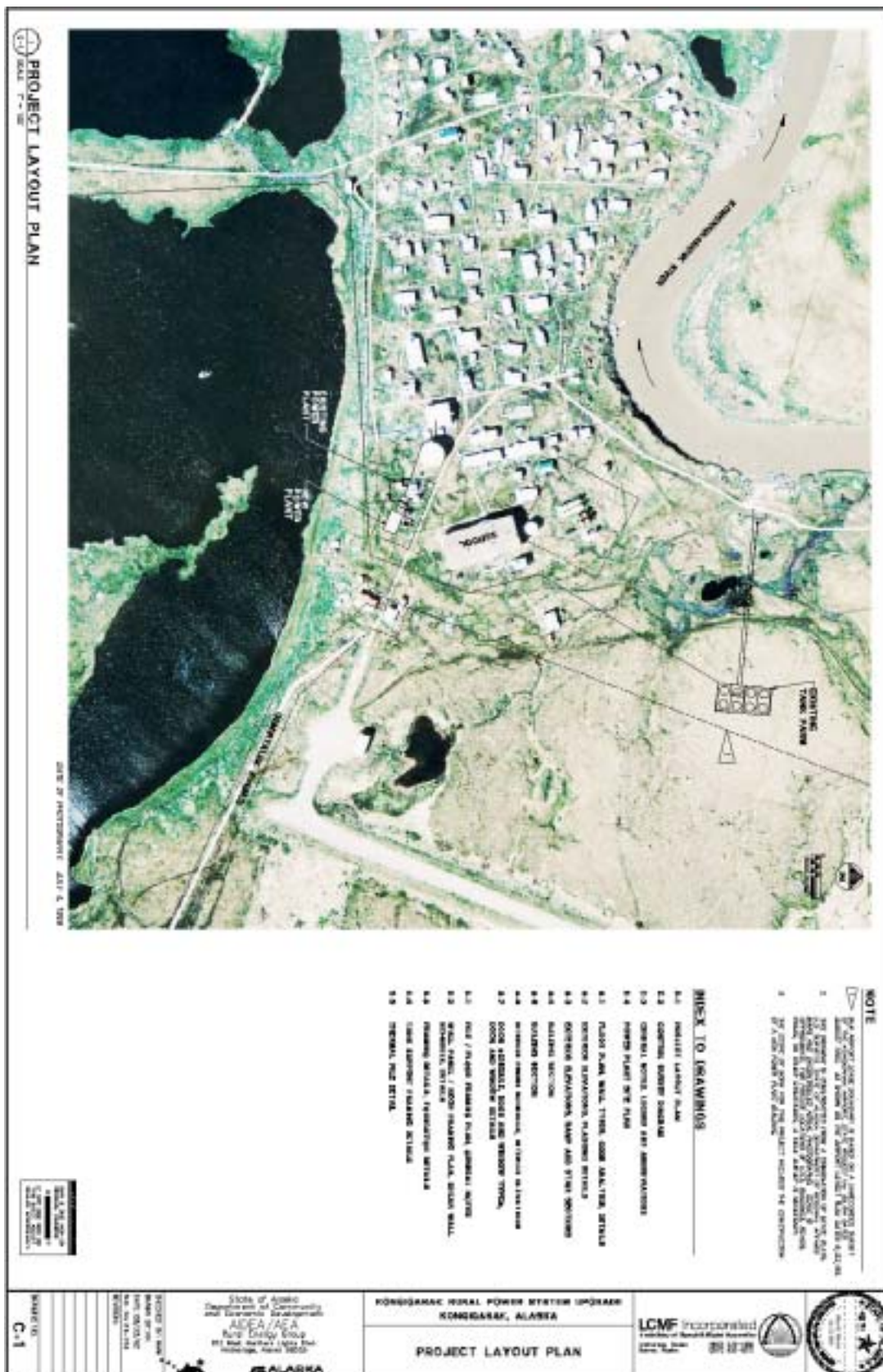
The proposed capacity of the Facility will be 710 Kw, using four generators, which is based on a 33% increase from the existing capacity, taking into account the 3% annual growth in consumption over the next ten years. The generators will be sized so the largest generator can handle peak loading during the winter.

The Facility's power generation capacity is in excess of its present usage. The Commission guidelines dictate that extra capacity is provided to account for 10 years of growth in electric power requirements. The initial annual estimated Kwh generation by the community is estimated to be 905,000 Kwh; growing to 980,000 Kwh by year five.

#### **Project Layout and Site Plan**

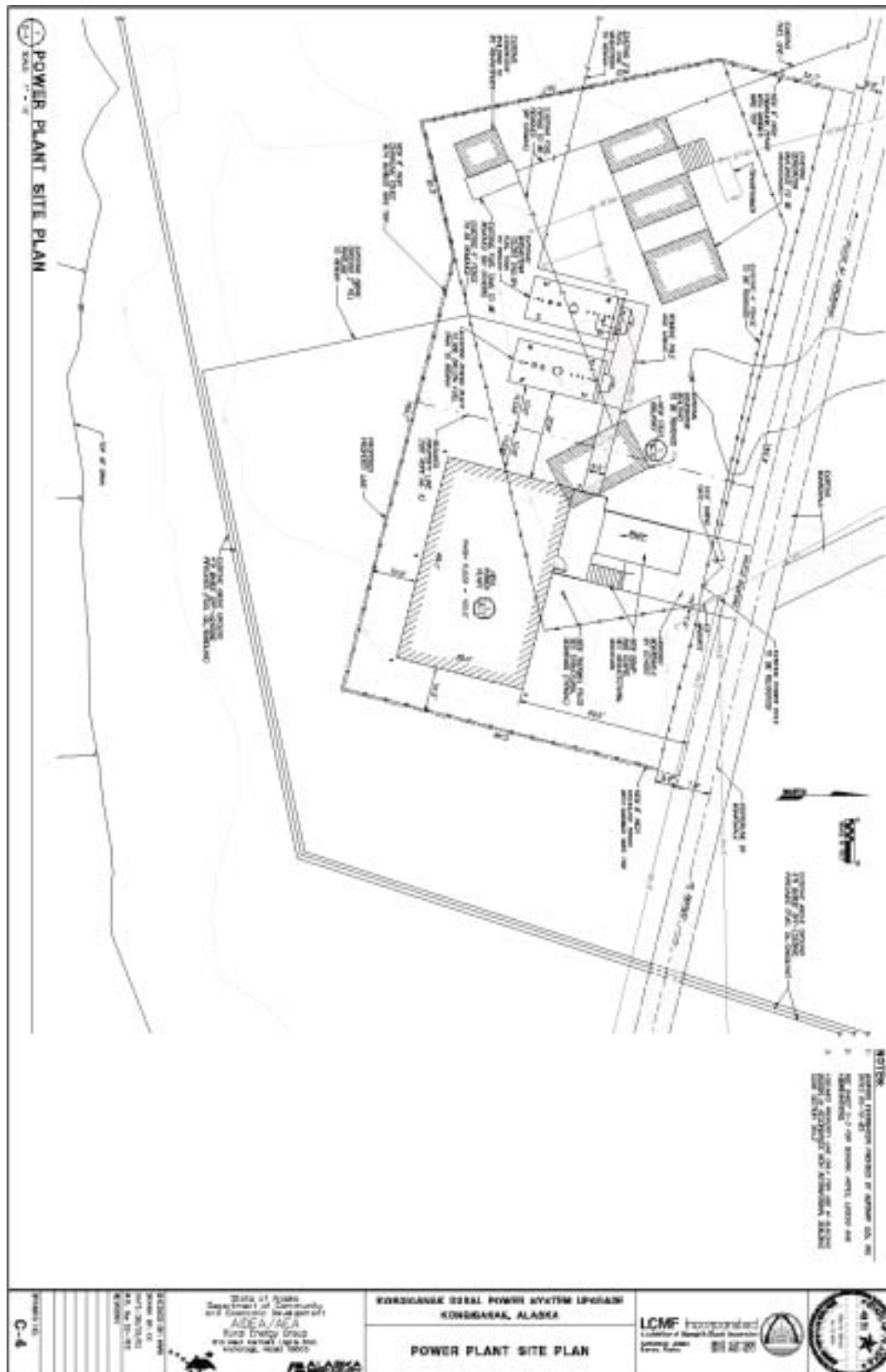
The following diagrams detail the project layout and site plan:

## Project Layout





## Site Plan



## **IV. PRIMARY OPERATOR**

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The Primary Operator for the Kongiganak Electric Utility, Puvurnaq Power Company, will be the Native Village of Kongiganak. A detailed statement of qualifications for the Primary Operator is included as *Appendix A: Primary Operator Statement of Qualification*.

### **Contact Information**

#### **Puvurnaq Power Company**

Primary Contact Name: Roland Andrew

Phone: (907) 557-5614 Fax: (907) 557-5614

Address: P.O. Box 5009, Kongiganak, AK 99569

### **Turnover and Assumption of Responsibilities/Sustainability**

The Facility will be turned over to the Primary Operator after the satisfactory completion, as determined by AEA or its representative, of a 14-day test period. After this test period, AEA will provide written notice (Certificate of Substantial Completion) stating that the Facility is ready for Beneficial Occupancy. Upon receipt of this Certificate, the Native Village of Kongiganak will become the Primary Operator and will assume responsibility for the use, day-to-day operations, and long-term maintenance of all generation facility components.

When the Project has been completed (the Facility is complete, crews have demobilized, invoices have been paid and there are no outstanding issues), the AEA will issue, through its Grants Manager, a Notice of Project Completion. This Notice is included in the Grant Agreement, see *Additional Related and Attached Documents*.

The Primary Operator is responsible for the long-term sustainability of the Facility for the benefit of the local community. The complete Facility will be maintained according to guidelines outlined in this plan, all manufacturers' recommendations for maintenance, and all State and Federal laws, codes and regulations governing operation.

The Primary Operator is responsible to establish and manage accounts for the O&M and R&R to ensure that sufficient resources exist to sustain the Facility as specified in the Plan.

### **Staffing and Training**

The Primary Operator will designate an Operations and Maintenance Manager (the "Manager") for the Facility. The Manager will be the point of contact for communications between the Primary Operator, the Commission and all other interested parties. The Primary Operator will name the Manager prior to the start of operation and will inform the Commission in a timely fashion whenever a Manager is to be replaced. The Manager will manage the Primary Operator's enterprises and will be given complete responsibility for operating the Facility in compliance with this Plan.



It is recognized that there will be, from time to time, turnover in various operational, maintenance and administrative positions. Because all functions are essential to the successful operation of the Facility, replacements will be recruited and trained as necessary. The Manager will be responsible for maintaining adequate staffing and training at all times, and when the Primary Operator lacks trained operators and administrative staff, training will be obtained to ensure sustained Facility operation.

The Primary Operator will utilize the AEA Circuit-Rider Training Program for on-site, hands-on training, as well as other training programs offered by AEA, the Alaska Vocational Technical Center (AVTEC) in Seward, the Commission, and others.

### **Financial Responsibilities**

There are two cost categories that will be incurred in the ongoing operation and upkeep of the Electric Utility equipment – O&M and R&R.

The Primary Operator will incur a number of expenses relating to the O&M of the equipment. O&M items are defined as expenses that are incurred on a regular basis (administration, audits, etc) and maintenance expenses that are incurred on an annual basis. O&M expenses are detailed in *Table C: Annual O&M Schedule* and a narrative detail is provided in *Section VIII: Financial Information* to address estimates and assumptions.

R&R costs are those expenses defined as items costing greater than \$5,000 and/or that are not replaced on an annual basis. *Table G: 40 Year R&R Schedule* details the anticipated items, the frequency of their replacement and their present day value.

The Primary Operator will maintain separate O&M and R&R accounts and will maintain a sufficient account balance to meet the O&M and R&R financial goals in this Plan. The O&M account may be an active non-interest bearing account. The Manager will be authorized to draw against the O&M funds for routine expenses of the Facility; however, individual expenditures in excess of \$5,000 will require authorization of the Primary Operator's management or governing body. See *Appendix A: Statement of Qualifications* for an overview of the Primary Operator's fiscal controls and accounting procedures. The R&R account must be an interest-bearing, managed savings account, which requires two signatories and a community resolution for withdrawals, until such time as the cash balance makes an escrow account more cost effective; then the R&R account must be transferred to an interest-bearing invested escrow account that is acceptable to the Denali Commission. See *Attachment 4: R&R Fund Account -- Sample Documents*, for examples of acceptable R&R account agreements and a sample community resolution that limits the use of the funds to R&R expenses only.

At least once a year, no later than November 30, the Primary Operator will develop a budget for the upcoming fiscal year, January 1 through December 31, for both O&M and R&R. This will include an update of actual expenses and projections and assumptions used in this Plan, as described in *Section VIII, Financial Information, Subsequent Operating Year Revisions*. Additionally, Tables A-H should be updated.

### **Operations and Maintenance Guidelines**

The Primary Operator will establish an account to fund the Facility O&M so that the O&M schedule can be completed and the Utility operations can be sustained into the future (this is anticipated to be an active non-interest bearing account). *Section VIII: Financial Information* provides *Table C: Annual O&M Schedule* and *Table D: 40 Year O&M Schedule* as a guide to plan for annual maintenance activities.

### **Renewal and Replacement Guidelines**

The Primary Operator shall establish a managed savings account or interest-bearing invested escrow account acceptable to the Denali Commission, which will ensure capitalization of an amount sufficient to maintain the R&R Schedule. *Section VIII: Financial Information* provides *Table G: 40 Year R&R Schedule* as a guide to plan for annual R&R activities and *Table H: 40 Year R&R Cashflow* as a guide to estimated annual R&R required contributions. These costs are based on the R&R cost estimate provided by HMS, Inc. See *Appendix B: O&M and R&R Cost Estimate*.

The Primary Operator will use the estimates in this Plan for year one contributions, and in subsequent years will recalculate contributions based upon actual costs.

### **Audits and Reporting**

The Primary Operator will arrange for an annual financial audit that is conducted by qualified, independent auditors. The Primary Operator will provide an annual report of operations to the Commission that includes a summary description of O&M and R&R projects; annual O&M and R&R budgets, expenditures and account balances; a projection of future O&M and R&R cash flows; and, any other information appropriate to the Utility. The Commission will review the reports and the annual financial audits of Utility operations and will actively monitor the Primary Operator's ability to operate consistent with guidelines outlined in this Plan. The Commission has reserved the right to visit the site and to access all books and records related to the Utility at any time upon written request.

## **V. SECONDARY OPERATOR**

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The Primary Operator agrees that, if the Primary Operator is not operating the Utility in compliance with the terms and conditions of the Plan, the Commission may designate a Secondary Operator to assist the Primary Operator or to take over such functions of the Utility operations that the Commission determines are necessary for such time as it determines is necessary, pursuant to the terms and conditions of Secondary Operator Agreement, which is included as an attachment to the Plan.

## **VI. INSURANCE**

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The Primary Operator is required to be insured for General Liability and Property; estimates are included in the annual O&M costs. For more specific information see the insurance quote included as an attachment to this Plan.

## **VII. REGULATORY REQUIREMENTS**

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The Primary Operator is responsible for ensuring adherence to all applicable State and Federal regulations. The Utility will be provided with, and will have on-site, if applicable, any of following spill response and related regulatory plans that need to be implemented:

- Environmental Protection Agency (EPA) Spill Prevention Control and Countermeasures (SPCC) Plan (40 CFR Part 112) – This plan confirms compliance of the Facility with the spill prevention and operating requirements of 40 CFR Part 112. A Registered Professional Engineer must certify the plan.

This plan will also include operator guidelines for spill training, drills, prevention and response and other related environmental information to ensure the environmental integrity of the Utility and the community.

This plan includes commitments and guidelines for spill prevention, response, and other related environmental information to ensure the environmental integrity of the Facility and the community. The plan will be developed near the end of Facility construction. The Primary Operator will participate in development and review of the plan as requested.

The Primary Operator must be certificated by the Regulatory Commission of Alaska.

The Primary Operator will apply to the State of Alaska, Department of Environment Conservation for a Construction Permit prior to facility construction and for a Diesel-Electric Generator Facility General Operating Permit.

## **VIII. FINANCIAL INFORMATION**

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All estimates and assumptions contained in this Plan are preliminary and are anticipated to change as the Project progresses. Actual expenses may vary throughout the life of the Utility and, therefore, should not be considered as final estimates.

### **Key Financial Assumptions**

- Annual inflation rate of 1.5%.
- Annual investment rate of 3%.
- R&R funds may be deposited into an interest bearing invested escrow account. Fees are assumed to be 1%, beginning when the account balance is estimated to be \$100,000.
- Annual collections rate of 90%.
- Detailed assumptions regarding labor rates, required labor hours, and other operating costs are provided in the tables that follow.
- Fuel costs for the first year are estimated to be \$1.60 per gallon.
- Annual Kwh usage is estimated to grow at 3.6% in year one, 4.2% in year two and .5% thereafter.

### **Key Operating Assumptions**

- Line loss and unbilled production are assumed to be 12% per year.
- Initial first year power generation is estimated to be 905,000 Kwh.
- Initial annual billed Kwh is estimated to be 796,000 Kwh.
- Energy is produced at 12 Kwh/gallon on average.

### **Explanation of Financial Terms**

- Total Annual Billed Kwh – The annual estimated Kwh of demand from all users groups (residential, community, commercial, etc) that is billed for payment.
- Assumed Annual Collectable Kwh – The annual estimated Kwh that is deemed to be collectable upon billing for payment.

### **Electric Power Generation Facility Funding**

This Plan is not a commitment; however, it is anticipated that project funding will be provided by the Denali Commission. For funding details see the Grant Agreement included as an attachment to this Plan.

### **Subsequent Operating Year Revisions**

Starting with the second year, as operating experience specific to this Utility is obtained, the projections and assumptions upon which the plan is based will be reviewed and modified. The following guidelines are for use in subsequent operating years in updating and modifying plan projections and assumptions:

*Step 1: Review previous years' O&M and R&R costs and compare to current projections*

*Step 2: Adjust O&M and R&R projections and assumptions based upon actual experience*

*Step 3: Recalculate per Kwh O&M surcharge based upon updated demand estimates*

*Step 4: Recalculate per Kwh R&R surcharge based upon updated demand estimates*

*Step 5: Update Table A: 40 Year Estimated Utility Net Income and Cashflow*

*Step 6: Establish updated retail rate per kilowatt hour*

TABLE A  
40 YEAR ESTIMATED UTILITY NET INCOME AND CASHFLOW

Inflation Rate :

3.5%

Annual Profit Margin

3.5%

Year	Annual Revenue			Annual Expenses				Net Income Before Taxes	Annual Cashflow Before Taxes			
	Estimated Retail Price \$/kWh	Assumed Collectible kWh/Year (Table B)	Estimated Annual Revenue	O&M Expenses (Table C&D)	Fuel Costs (Table E)	General & Administrative Expenses (Table F)	Depreciation (Table F)		Plus Depreciation (Table F)	Less: R&B Cash Deposit (Tables G&H)	Annual Cashflow	
1	\$ 0.365	716,760	\$ 261,823	\$ 52,302	\$ 120,667	\$ 70,000	\$ 10,000	\$ 8,854	\$ 10,000	\$ 7,668	\$ 11,690	\$ 11,690
2	\$ 0.364	735,688	\$ 270,313	\$ 53,067	\$ 127,078	\$ 71,050	\$ 10,330	\$ 9,148	\$ 10,330	\$ 7,737	\$ 11,861	\$ 11,861
3	\$ 0.361	776,160	\$ 280,399	\$ 53,883	\$ 134,616	\$ 72,116	\$ 10,302	\$ 9,482	\$ 10,302	\$ 7,762	\$ 12,023	\$ 12,023
4	\$ 0.367	776,548	\$ 284,676	\$ 54,691	\$ 136,704	\$ 73,197	\$ 10,437	\$ 9,627	\$ 10,437	\$ 7,763	\$ 12,318	\$ 12,318
5	\$ 0.380	776,936	\$ 294,673	\$ 55,512	\$ 138,824	\$ 74,295	\$ 16,271	\$ 9,972	\$ 16,271	\$ 23,306	\$ 2,655	\$ 2,655
6	\$ 0.383	777,325	\$ 299,281	\$ 56,344	\$ 140,976	\$ 75,410	\$ 16,430	\$ 10,121	\$ 16,430	\$ 23,320	\$ 3,251	\$ 3,251
7	\$ 0.391	777,713	\$ 305,757	\$ 57,180	\$ 143,163	\$ 76,541	\$ 16,592	\$ 10,272	\$ 16,592	\$ 23,331	\$ 3,532	\$ 3,532
8	\$ 0.389	778,102	\$ 302,445	\$ 58,047	\$ 145,383	\$ 77,686	\$ 11,996	\$ 10,228	\$ 11,996	\$ 23,343	\$ (2,087)	\$ (2,087)
9	\$ 0.394	778,491	\$ 307,958	\$ 58,918	\$ 147,637	\$ 78,854	\$ 11,265	\$ 10,384	\$ 11,265	\$ 23,355	\$ (1,706)	\$ (1,706)
10	\$ 0.442	778,881	\$ 344,524	\$ 59,802	\$ 149,927	\$ 80,037	\$ 43,307	\$ 11,651	\$ 43,307	\$ 38,944	\$ 13,514	\$ 13,514
11	\$ 0.448	779,270	\$ 349,278	\$ 60,699	\$ 152,252	\$ 81,238	\$ 43,279	\$ 11,811	\$ 43,279	\$ 38,964	\$ 16,127	\$ 16,127
12	\$ 0.454	779,660	\$ 354,106	\$ 61,609	\$ 154,613	\$ 82,456	\$ 43,455	\$ 11,975	\$ 43,455	\$ 38,983	\$ 16,444	\$ 16,444
13	\$ 0.449	780,050	\$ 349,570	\$ 62,533	\$ 157,010	\$ 83,693	\$ 34,801	\$ 11,831	\$ 34,801	\$ 30,002	\$ 7,630	\$ 7,630
14	\$ 0.455	780,440	\$ 354,845	\$ 63,471	\$ 159,445	\$ 84,949	\$ 34,980	\$ 12,000	\$ 34,980	\$ 30,022	\$ 7,958	\$ 7,958
15	\$ 0.442	780,830	\$ 349,830	\$ 64,428	\$ 161,918	\$ 86,223	\$ 21,238	\$ 11,483	\$ 21,238	\$ 54,658	\$ (21,737)	\$ (21,737)
16	\$ 0.449	781,220	\$ 350,615	\$ 65,390	\$ 164,429	\$ 87,516	\$ 21,423	\$ 11,857	\$ 21,423	\$ 54,685	\$ (21,404)	\$ (21,404)
17	\$ 0.455	781,611	\$ 350,822	\$ 66,371	\$ 166,979	\$ 88,829	\$ 21,611	\$ 12,033	\$ 21,611	\$ 54,713	\$ (21,069)	\$ (21,069)
18	\$ 0.453	782,002	\$ 354,313	\$ 67,366	\$ 169,568	\$ 90,161	\$ 15,235	\$ 11,982	\$ 15,235	\$ 54,740	\$ (27,523)	\$ (27,523)
19	\$ 0.510	782,393	\$ 399,076	\$ 68,377	\$ 172,198	\$ 91,514	\$ 53,492	\$ 13,499	\$ 53,492	\$ 54,767	\$ (22,270)	\$ (22,270)
20	\$ 0.517	782,784	\$ 404,325	\$ 69,402	\$ 174,868	\$ 92,887	\$ 53,688	\$ 13,680	\$ 53,688	\$ 54,795	\$ (22,573)	\$ (22,573)
21	\$ 0.524	783,175	\$ 410,957	\$ 70,445	\$ 177,580	\$ 94,280	\$ 53,885	\$ 13,867	\$ 53,885	\$ 54,823	\$ (22,876)	\$ (22,876)
22	\$ 0.530	783,567	\$ 415,674	\$ 71,500	\$ 180,334	\$ 95,694	\$ 54,090	\$ 14,057	\$ 54,090	\$ 54,851	\$ (23,179)	\$ (23,179)
23	\$ 0.530	783,959	\$ 415,690	\$ 72,575	\$ 183,130	\$ 97,126	\$ 48,801	\$ 14,057	\$ 48,801	\$ 54,879	\$ (23,482)	\$ (23,482)
24	\$ 0.537	784,351	\$ 421,479	\$ 73,661	\$ 185,970	\$ 98,586	\$ 49,009	\$ 14,253	\$ 49,009	\$ 54,907	\$ (23,785)	\$ (23,785)
25	\$ 0.552	784,743	\$ 433,313	\$ 74,766	\$ 188,854	\$ 100,063	\$ 54,976	\$ 14,453	\$ 54,976	\$ 54,934	\$ (24,088)	\$ (24,088)
26	\$ 0.559	785,135	\$ 439,282	\$ 75,888	\$ 191,783	\$ 101,566	\$ 55,191	\$ 14,655	\$ 55,191	\$ 54,961	\$ (24,391)	\$ (24,391)
27	\$ 0.567	785,528	\$ 445,340	\$ 77,026	\$ 194,757	\$ 103,090	\$ 55,406	\$ 14,858	\$ 55,406	\$ 54,988	\$ (24,694)	\$ (24,694)
28	\$ 0.564	785,920	\$ 443,605	\$ 78,181	\$ 197,777	\$ 104,636	\$ 48,009	\$ 15,060	\$ 48,009	\$ 55,015	\$ (25,000)	\$ (25,000)
29	\$ 0.572	786,313	\$ 449,849	\$ 79,354	\$ 200,844	\$ 106,206	\$ 48,234	\$ 15,212	\$ 48,234	\$ 55,042	\$ (25,307)	\$ (25,307)
30	\$ 0.621	786,707	\$ 488,509	\$ 80,544	\$ 203,958	\$ 107,799	\$ 79,688	\$ 16,520	\$ 79,688	\$ 65,329	\$ (12,863)	\$ (12,863)
31	\$ 0.629	787,100	\$ 494,946	\$ 81,753	\$ 207,121	\$ 109,416	\$ 79,919	\$ 16,730	\$ 79,919	\$ 65,356	\$ (13,070)	\$ (13,070)
32	\$ 0.637	787,493	\$ 501,481	\$ 82,979	\$ 210,333	\$ 111,057	\$ 80,154	\$ 16,938	\$ 80,154	\$ 65,383	\$ (13,277)	\$ (13,277)
33	\$ 0.631	787,887	\$ 496,970	\$ 84,224	\$ 213,595	\$ 112,723	\$ 69,631	\$ 16,806	\$ 69,631	\$ 65,410	\$ (13,484)	\$ (13,484)
34	\$ 0.639	788,281	\$ 503,714	\$ 85,487	\$ 216,907	\$ 114,414	\$ 69,873	\$ 17,034	\$ 69,873	\$ 65,437	\$ (13,691)	\$ (13,691)
35	\$ 0.596	788,675	\$ 469,680	\$ 86,760	\$ 220,271	\$ 116,130	\$ 30,627	\$ 15,883	\$ 30,627	\$ 65,464	\$ (13,898)	\$ (13,898)
36	\$ 0.604	789,070	\$ 476,625	\$ 88,071	\$ 223,687	\$ 117,872	\$ 30,876	\$ 16,118	\$ 30,876	\$ 65,491	\$ (14,105)	\$ (14,105)
37	\$ 0.613	789,464	\$ 483,672	\$ 89,392	\$ 227,156	\$ 119,640	\$ 51,829	\$ 16,356	\$ 51,829	\$ 65,518	\$ (14,312)	\$ (14,312)
38	\$ 0.609	789,859	\$ 480,775	\$ 90,735	\$ 230,678	\$ 121,434	\$ 21,672	\$ 16,258	\$ 21,672	\$ 65,545	\$ (14,519)	\$ (14,519)
39	\$ 0.618	790,254	\$ 488,041	\$ 92,094	\$ 234,255	\$ 123,256	\$ 21,932	\$ 16,301	\$ 21,932	\$ 65,572	\$ (14,726)	\$ (14,726)
40	\$ 0.718	790,649	\$ 567,854	\$ 93,475	\$ 237,888	\$ 125,103	\$ 92,322	\$ 19,204	\$ 92,322	\$ 81,431	\$ (25,680)	\$ (25,680)



**TABLE B**  
**Power Generation and Consumption Summary**

Year	Total Generated Kwh/Year	Annual Line Loss and Unbilled	Total Billed Kwh/Year	Assumed Collectable Kwh/Year
1	905,000	108,600	796,400	716,760
2	939,000	112,680	826,320	743,688
3	980,000	117,600	862,400	776,160
4	980,490	117,659	862,831	776,548
5	980,980	117,718	863,263	776,936
6	981,471	117,776	863,694	777,325
7	981,961	117,835	864,126	777,713
8	982,452	117,894	864,558	778,102
9	982,944	117,953	864,990	778,491
10	983,435	118,012	865,423	778,881
11	983,927	118,071	865,856	779,270
12	984,419	118,130	866,289	779,660
13	984,911	118,189	866,722	780,050
14	985,403	118,248	867,155	780,440
15	985,896	118,308	867,589	780,830
16	986,389	118,367	868,022	781,220
17	986,882	118,426	868,456	781,611
18	987,376	118,485	868,891	782,002
19	987,869	118,544	869,325	782,393
20	988,363	118,604	869,760	782,784
21	988,858	118,663	870,195	783,175
22	989,352	118,722	870,630	783,567
23	989,847	118,782	871,065	783,959
24	990,342	118,841	871,501	784,351
25	990,837	118,900	871,936	784,743
26	991,332	118,960	872,372	785,135
27	991,828	119,019	872,809	785,528
28	992,324	119,079	873,245	785,920
29	992,820	119,138	873,682	786,313
30	993,316	119,198	874,118	786,707
31	993,813	119,258	874,555	787,100
32	994,310	119,317	874,993	787,493
33	994,807	119,377	875,430	787,887
34	995,304	119,437	875,868	788,281
35	995,802	119,496	876,306	788,675
36	996,300	119,556	876,744	789,070
37	996,798	119,616	877,182	789,464
38	997,297	119,676	877,621	789,859
39	997,795	119,735	878,060	790,254
40	998,294	119,795	878,499	790,649

Assumed Collection Rate

**90%**

Annual Kwh Increase  
Years 3-40

**0.05%**

Annual Line Loss/Unbilled

**12%**

**TABLE C**  
**ANNUAL "O and M" SCHEDULE**

Position	Rate Per Hour	Fringe Rate	Total Hourly Cost	Duties
Operator 1 - Primary	\$ 13.75	19.4%	\$ 16.42	Maintenance & Primary Operations
Bookkeeper	\$ 12.25	19.4%	\$ 14.63	Payroll, Accounts Payable
Utility Manager	\$ 14.75	19.4%	\$ 17.61	Manager, Denali Commission Reporting

Annual O&M Costs:				
Labor:	Labor Costs			Annual Costs
	Hours/ Month	Hourly Cost	Monthly Cost	
Operating Labor				
Operator 1	<u>41.59</u>	\$ 16.42	\$ 682.86	
Subtotal Operating Labor	41.59		\$ 682.86	\$ 8,194
Administrative Labor				
Bookkeeper	8	\$ 14.63	\$ 117.01	
Utility Manager	<u>20</u>	\$ 17.61	\$ 352.23	
Subtotal Administrative Labor	28		\$ 469.24	\$ 5,631
<b>Materials:</b>				
Materials & Equipment				\$ 7,302
Top End Overhaul				\$ 5,975
Outside Labor				\$ 1,200
<b>Other Costs:</b>				
Training (Lump Sum)				\$ 1,000
Annual Audit (Lump Sum)				\$ 2,000
Office Expenses				\$ 1,000
Insurance				\$ 20,000
<b>Total Annual O&amp;M Costs</b>				<b>\$ 52,302</b>

**TABLE D**  
**40 YEAR "O and M" SCHEDULE**

Year	Annual O&M Expenses	Total Billed kWh/Year	Assumed Collectable kWh/Year	O&M Surcharge \$/kWh
1	\$ 52,302	796,400	716,760	\$ 0.073
2	\$ 53,087	826,320	743,688	\$ 0.071
3	\$ 53,883	862,400	776,160	\$ 0.069
4	\$ 54,691	862,831	776,548	\$ 0.070
5	\$ 55,512	863,263	776,936	\$ 0.071
6	\$ 56,344	863,694	777,325	\$ 0.072
7	\$ 57,189	864,126	777,713	\$ 0.074
8	\$ 58,047	864,558	778,102	\$ 0.075
9	\$ 58,918	864,990	778,491	\$ 0.076
10	\$ 59,802	865,423	778,881	\$ 0.077
11	\$ 60,699	865,856	779,270	\$ 0.078
12	\$ 61,609	866,289	779,660	\$ 0.079
13	\$ 62,533	866,722	780,050	\$ 0.080
14	\$ 63,471	867,155	780,440	\$ 0.081
15	\$ 64,424	867,589	780,830	\$ 0.083
16	\$ 65,390	868,022	781,220	\$ 0.084
17	\$ 66,371	868,456	781,611	\$ 0.085
18	\$ 67,366	868,891	782,002	\$ 0.086
19	\$ 68,377	869,325	782,393	\$ 0.087
20	\$ 69,402	869,760	782,784	\$ 0.089
21	\$ 70,443	870,195	783,175	\$ 0.090
22	\$ 71,500	870,630	783,567	\$ 0.091
23	\$ 72,573	871,065	783,959	\$ 0.093
24	\$ 73,661	871,501	784,351	\$ 0.094
25	\$ 74,766	871,936	784,743	\$ 0.095
26	\$ 75,888	872,372	785,135	\$ 0.097
27	\$ 77,026	872,809	785,528	\$ 0.098
28	\$ 78,181	873,245	785,920	\$ 0.099
29	\$ 79,354	873,682	786,313	\$ 0.101
30	\$ 80,544	874,118	786,707	\$ 0.102
31	\$ 81,753	874,555	787,100	\$ 0.104
32	\$ 82,979	874,993	787,493	\$ 0.105
33	\$ 84,224	875,430	787,887	\$ 0.107
34	\$ 85,487	875,868	788,281	\$ 0.108
35	\$ 86,769	876,306	788,675	\$ 0.110
36	\$ 88,071	876,744	789,070	\$ 0.112
37	\$ 89,392	877,182	789,464	\$ 0.113
38	\$ 90,733	877,621	789,859	\$ 0.115
39	\$ 92,094	878,060	790,254	\$ 0.117
40	\$ 93,475	878,499	790,649	\$ 0.118

Inflation Rate	1.5%
Collection Rate	90%

**TABLE E**  
**ANNUAL FUEL COSTS**

Inflation Rate		1.5%	KwH Produced per Gallon		12	
Year	Estimated Fuel Cost per Gallon	Total Generated KwH/Year	Total Fuel Usage @ 12 KwH/Gallon	Total Annual Fuel Costs	Assumed Collectable KwH/Year	Fuel Cost \$/KwH
1	\$ 1.60	905,000	75,417	\$ 120,667	716,760	\$ 0.16
2	\$ 1.62	939,000	78,250	\$ 127,078	743,688	\$ 0.171
3	\$ 1.65	980,000	81,667	\$ 134,616	776,160	\$ 0.173
4	\$ 1.67	980,490	81,708	\$ 136,704	776,548	\$ 0.176
5	\$ 1.70	980,980	81,748	\$ 138,824	776,936	\$ 0.179
6	\$ 1.72	981,471	81,789	\$ 140,976	777,325	\$ 0.181
7	\$ 1.75	981,961	81,830	\$ 143,163	777,713	\$ 0.184
8	\$ 1.78	982,452	81,871	\$ 145,383	778,102	\$ 0.187
9	\$ 1.80	982,944	81,912	\$ 147,637	778,491	\$ 0.190
10	\$ 1.83	983,435	81,953	\$ 149,927	778,881	\$ 0.192
11	\$ 1.86	983,927	81,994	\$ 152,252	779,270	\$ 0.195
12	\$ 1.88	984,419	82,035	\$ 154,613	779,660	\$ 0.198
13	\$ 1.91	984,911	82,076	\$ 157,010	780,050	\$ 0.201
14	\$ 1.94	985,403	82,117	\$ 159,445	780,440	\$ 0.204
15	\$ 1.97	985,896	82,158	\$ 161,918	780,830	\$ 0.207
16	\$ 2.00	986,389	82,199	\$ 164,429	781,220	\$ 0.210
17	\$ 2.03	986,882	82,240	\$ 166,979	781,611	\$ 0.214
18	\$ 2.06	987,376	82,281	\$ 169,568	782,002	\$ 0.217
19	\$ 2.09	987,869	82,322	\$ 172,198	782,393	\$ 0.220
20	\$ 2.12	988,363	82,364	\$ 174,868	782,784	\$ 0.223
21	\$ 2.15	988,858	82,405	\$ 177,580	783,175	\$ 0.227
22	\$ 2.19	989,352	82,446	\$ 180,334	783,567	\$ 0.230
23	\$ 2.22	989,847	82,487	\$ 183,130	783,959	\$ 0.234
24	\$ 2.25	990,342	82,528	\$ 185,970	784,351	\$ 0.237
25	\$ 2.29	990,837	82,570	\$ 188,854	784,743	\$ 0.241
26	\$ 2.32	991,332	82,611	\$ 191,783	785,135	\$ 0.244
27	\$ 2.36	991,828	82,652	\$ 194,757	785,528	\$ 0.248
28	\$ 2.39	992,324	82,694	\$ 197,777	785,920	\$ 0.252
29	\$ 2.43	992,820	82,735	\$ 200,844	786,313	\$ 0.255
30	\$ 2.46	993,316	82,776	\$ 203,958	786,707	\$ 0.259
31	\$ 2.50	993,813	82,818	\$ 207,121	787,100	\$ 0.263
32	\$ 2.54	994,310	82,859	\$ 210,333	787,493	\$ 0.267
33	\$ 2.58	994,807	82,901	\$ 213,595	787,887	\$ 0.271
34	\$ 2.62	995,304	82,942	\$ 216,907	788,281	\$ 0.275
35	\$ 2.65	995,802	82,984	\$ 220,271	788,675	\$ 0.279
36	\$ 2.69	996,300	83,025	\$ 223,687	789,070	\$ 0.283
37	\$ 2.73	996,798	83,067	\$ 227,156	789,464	\$ 0.288
38	\$ 2.78	997,297	83,108	\$ 230,678	789,859	\$ 0.292
39	\$ 2.82	997,795	83,150	\$ 234,255	790,254	\$ 0.296
40	\$ 2.86	998,294	83,191	\$ 237,888	790,649	\$ 0.301

**TABLE F**  
**ANNUAL "G and A" AND DEPRECIATION EXPENSES**

Annual General & Administrative Costs:	
Salaries	\$ 60,000
Office Expenses	\$ 10,000
<b>Total Annual O&amp;M Costs</b>	<b>\$ 70,000</b>

Depreciation Expense:			
Year	Depreciation R&R	Depreciation- Other Assets	Total Annual Depreciation
1		\$ 10,000	\$ 10,000
2		\$ 10,150	\$ 10,150
3		\$ 10,302	\$ 10,302
4		\$ 10,457	\$ 10,457
5	\$ 5,657	\$ 10,614	\$ 16,271
6	\$ 5,657	\$ 10,773	\$ 16,430
7	\$ 5,657	\$ 10,934	\$ 16,592
8	\$ -	\$ 11,098	\$ 11,098
9	\$ -	\$ 11,265	\$ 11,265
10	\$ 31,673	\$ 11,434	\$ 43,107
11	\$ 31,673	\$ 11,605	\$ 43,279
12	\$ 31,673	\$ 11,779	\$ 43,453
13	\$ 22,845	\$ 11,956	\$ 34,801
14	\$ 22,845	\$ 12,136	\$ 34,980
15	\$ 8,921	\$ 12,318	\$ 21,238
16	\$ 8,921	\$ 12,502	\$ 21,423
17	\$ 8,921	\$ 12,690	\$ 21,611
18	\$ 2,355	\$ 12,880	\$ 15,235
19	\$ 2,355	\$ 13,073	\$ 53,492
20	\$ 40,419	\$ 13,270	\$ 53,688
21	\$ 40,419	\$ 13,469	\$ 53,888
22	\$ 40,419	\$ 13,671	\$ 54,090
23	\$ 34,925	\$ 13,876	\$ 48,801
24	\$ 34,925	\$ 14,084	\$ 49,009
25	\$ 40,681	\$ 14,295	\$ 54,976
26	\$ 40,681	\$ 14,509	\$ 55,191
27	\$ 40,681	\$ 14,727	\$ 55,408
28	\$ 33,061	\$ 14,948	\$ 48,009
29	\$ 33,061	\$ 15,172	\$ 48,234
30	\$ 64,289	\$ 15,400	\$ 79,688
31	\$ 64,289	\$ 15,631	\$ 79,919
32	\$ 64,289	\$ 15,865	\$ 80,154
33	\$ 53,528	\$ 16,103	\$ 69,631
34	\$ 53,528	\$ 16,345	\$ 69,873
35	\$ 14,037	\$ 16,590	\$ 30,627
36	\$ 14,037	\$ 16,839	\$ 30,876
37	\$ 14,037	\$ 17,091	\$ 31,129
38	\$ 4,324	\$ 17,348	\$ 21,672
39	\$ 4,324	\$ 17,608	\$ 21,932
40	\$ 74,350	\$ 17,872	\$ 92,222

**TABLE G**  
**40 YEAR "R and R" SCHEDULE**

Year of Activity	R&R Activity	Present Day Value	Annual Total	Inflated Value
5	Repair Ramp/Bowchicks Replace Valves/Gauges Repair Siding/Overhead Door Upgrade Floor/Walls/Gidings Mechanical Upgrade Replace Batteries/Alternators/Etc Repair Ballasts/Lenses Overhead Generators/Controls	\$ 2,667 437 3,436 3,578 1,000 3,500 1,733 97,790	\$ 15,991	\$ 16,572
10	Repair Ramp/Bowchicks Pump Replacement Refurbish Electric Systems Floor/Roof Repair Repair Siding/Overhead Door Repair Roof Change Door Hardware Upgrade Floor/Walls/Gidings Mechanical Upgrade Repair Doors/Gidings Repair Fire Suppression System Replace Rerders/Fuses Repair Ballasts/Lenses Overhead Generators/Controls	\$ 2,667 1,590 686 1,733 3,436 1,573 875 3,578 1,000 2,134 4,500 1,740 1,733 97,790	\$ 124,585	\$ 142,449
15	Repair Ramp/Bowchicks Replace Valves/Gauges Repair Siding/Overhead Door Upgrade Floor/Walls/Gidings Mechanical Upgrade Replace Batteries/Alternators/Etc Repair Ballasts/Lenses Replace Roofing/Insulation	\$ 2,667 437 3,436 3,578 1,000 3,500 1,733 15,129	\$ 31,130	\$ 36,332
20	Pump Replacement Refurbish Electric Systems Floor/Roof Repair Replace Piles/Bearings Repair Roof Window Upgrade Replace Bowchicks Replace Electrical Systems Upgrade Floor/Roofs Replace Windows/Doors Replace RFP Panels Refurbish Doors/Gidings Replace Panels/Switches/Fittings/Alarms Replace Generators/Feeders & Conductors	\$ 1,590 686 1,733 9,811 1,573 955 9,866 7,500 7,545 5,934 12,233 10,800 37,238 244,290	\$ 351,674	\$ 466,654
25	Repair Ramp/Bowchicks Replace Valves/Gauges Repair Siding/Overhead Door Upgrade Floor/Walls/Gidings Mechanical Upgrade Replace Batteries/Alternators/Etc Repair Ballasts/Lenses	\$ 2,667 437 3,436 3,578 1,000 3,500 1,733	\$ 15,991	\$ 22,839
30	Repair Ramp/Bowchicks Pump Replacement Refurbish Electric Systems Floor/Roof Repair Repair Siding/Overhead Door Change Door Hardware Upgrade Floor/Walls/Gidings Mechanical Upgrade Repair Doors/Gidings Repair Fire Suppression System Replace Rerders/Fuses Repair Ballasts/Lenses Overhead Generators/Controls	\$ 2,667 1,590 686 1,733 3,436 875 3,578 1,000 2,134 4,500 1,740 1,733 97,790	\$ 125,012	\$ 189,436
35	Repair Ramp/Bowchicks Replace Valves/Gauges Repair Siding/Overhead Door Repair Roof Upgrade Floor/Walls/Gidings Mechanical Upgrade Replace Batteries/Alternators/Etc Repair Ballasts/Lenses Replace Roofing/Insulation	\$ 2,667 437 3,436 1,573 3,578 1,000 3,500 1,733 15,129	\$ 32,693	\$ 54,258
40	Pump Replacement Refurbish Electric Systems Floor/Roof Repair Replace Piles/Bearings Replace Bowchicks Replace Ramps/Stairs Replace Fuel Tanks Replace Electrical Systems Upgrade Floor/Roofs Replace Siding/Insulation/Windows Replace Window/Doors Replace RFP Panels Replacement Mechanical Systems Replace Fire Suppression System Replace Panels/Switches/Fittings/Alarms Replace Conductors/Transformers Replace Generators/Feeders & Conductors Replace Switchgear/Controls	\$ 1,590 686 1,733 9,811 9,866 24,790 36,000 7,500 7,545 27,636 5,924 12,233 48,280 28,500 37,238 34,600 244,290 79,990	\$ 588,832	\$ 1,052,349

R&R Activities	Cost	Activity Year	Depreciation Term
Repair Ramp/Bowchicks	\$ 2,667	5/30/35/35/35/35	5
Replace Bowchicks	\$ 9,866	20/40	20
Replace Ramps/Stairs	\$ 24,790	40	20
Pump Replacement	\$ 1,590	30/20/30/40	5
Replace Fuel Tanks	\$ 36,000	40	20
Replace Valves/Gauges	\$ 437	5/15/25/30	5
Refurbish Electric Systems	\$ 686	30/30/30/40	5
Replace Electrical Systems	\$ 7,500	20/40	20
Floor/Roof Repair	\$ 3,733	30/20/30/40	5
Upgrade Floor/Roofs	\$ 7,545	20/40	10
Repair Siding/Overhead Door	\$ 3,436	5/30/35/25/30/35	5
Replace Siding/Insulation/Windows	\$ 27,636	40	20
Replace Piles/Bearings	\$ 9,811	20/40	10
Repair Roof	\$ 1,573	10/20/35	5
Replace Roofing/Insulation	\$ 15,129	15/35	10
Change Door Hardware	\$ 875	10/30	5
Window Upgrade	\$ 955	20	5
Upgrade Floors/Walls/Gidings	\$ 3,578	5/30/35/25/30/35	5
Replace Windows/Doors	\$ 5,924	20/40	5
Mechanical Upgrade	\$ 1,000	5/30/35/25/30/35	5
Replacement Mechanical Systems	\$ 48,280	40	20
Repair Doors/Gidings	\$ 2,134	10/30	5
Refurbish Doors/Gidings	\$ 10,800	20/40	10
Repair Fire Suppression System	\$ 4,500	10/30	10
Replace Fire Suppression System	\$ 28,500	40	20
Replace Rerders/Fuses	\$ 1,740	10/30	5
Repair Ballasts/Lenses	\$ 1,733	5/30/35/25/30/35	5
Replace Panels/Switches/Fittings/Alarms	\$ 27,238	20/40	10
Overhead Generators/Controls	\$ 97,790	10/30	5
Replace Generators/Feeders & Conductors	\$ 244,290	20/40	15
Replace Batteries/Alternators/Etc	\$ 3,500	5/15/25/30	5
Replace RFP Panels	\$ 12,233	20/40	10
Replace Conductors/Transformers	\$ 34,600	40	20
Replace Switchgear/Controls	\$ 29,990	40	20

Inflation Rate: 1.5%  
 Retirement Rate: 0%



**TABLE H**  
**40 YEAR RENEWAL AND REPLACEMENT CASHFLOW**

Year	R & R Fund Balance						Assumed Collectable Kwh/Year	R&R Surcharge \$/Kwh
	Beq. of Year Balance	Annual Deposits	Renewals/ Replacements	Interest Earnings (Net of Fees)	End of Year Balance			
1	\$ -	\$ 7,168		\$ -	\$ 7,168		\$ 716,760	\$ 0.010
2	\$ 7,168	\$ 7,437		\$ 213	\$ 14,820		\$ 743,688	\$ 0.010
3	\$ 14,820	\$ 7,762		\$ 443	\$ 23,026		\$ 776,160	\$ 0.010
4	\$ 23,026	\$ 7,765		\$ 691	\$ 31,482		\$ 776,548	\$ 0.010
5	\$ 31,482	\$ 23,308	\$ 16,972	\$ 433	\$ 38,253		\$ 776,936	\$ 0.030
6	\$ 38,253	\$ 23,320		\$ 1,148	\$ 62,720		\$ 777,325	\$ 0.030
7	\$ 62,720	\$ 23,331		\$ 1,882	\$ 87,933		\$ 777,713	\$ 0.030
8	\$ 87,933	\$ 23,343		\$ 2,638	\$ 113,914		\$ 778,102	\$ 0.030
9	\$ 113,914	\$ 23,355		\$ 3,417	\$ 140,687		\$ 778,491	\$ 0.030
10	\$ 140,687	\$ 38,944	\$ 142,449	\$ -	\$ 37,181		\$ 778,881	\$ 0.030
11	\$ 37,181	\$ 38,964		\$ 1,113	\$ 77,260		\$ 779,270	\$ 0.050
12	\$ 77,260	\$ 38,983		\$ 2,318	\$ 118,561		\$ 779,660	\$ 0.050
13	\$ 118,561	\$ 39,002		\$ 2,371	\$ 159,935		\$ 780,050	\$ 0.050
14	\$ 159,935	\$ 39,022		\$ 3,199	\$ 202,156		\$ 780,440	\$ 0.050
15	\$ 202,156	\$ 54,658	\$ 38,332	\$ 3,276	\$ 221,758		\$ 780,830	\$ 0.070
16	\$ 221,758	\$ 54,685		\$ 4,435	\$ 280,878		\$ 781,220	\$ 0.070
17	\$ 280,878	\$ 54,713		\$ 5,618	\$ 341,209		\$ 781,611	\$ 0.070
18	\$ 341,209	\$ 54,740		\$ 6,824	\$ 402,773		\$ 782,002	\$ 0.070
19	\$ 402,773	\$ 54,767		\$ 8,053	\$ 465,596		\$ 782,393	\$ 0.070
20	\$ 465,596	\$ 54,795	\$ 466,654	\$ -	\$ 53,737		\$ 782,784	\$ 0.070
21	\$ 53,737	\$ 33,243		\$ 1,073	\$ 90,054		\$ 783,175	\$ 0.045
22	\$ 90,054	\$ 33,693		\$ 2,702	\$ 126,449		\$ 783,567	\$ 0.043
23	\$ 126,449	\$ 33,710		\$ 2,529	\$ 162,689		\$ 783,959	\$ 0.043
24	\$ 162,689	\$ 33,727		\$ 3,254	\$ 199,669		\$ 784,351	\$ 0.043
25	\$ 199,669	\$ 33,744	\$ 22,859	\$ 3,536	\$ 214,090		\$ 784,743	\$ 0.043
26	\$ 214,090	\$ 49,464		\$ 4,282	\$ 267,836		\$ 785,135	\$ 0.063
27	\$ 267,836	\$ 49,488		\$ 5,357	\$ 322,681		\$ 785,528	\$ 0.063
28	\$ 322,681	\$ 49,513		\$ 6,434	\$ 378,647		\$ 785,920	\$ 0.063
29	\$ 378,647	\$ 49,538		\$ 7,573	\$ 435,758		\$ 786,313	\$ 0.063
30	\$ 435,758	\$ 49,563	\$ 189,436	\$ 4,926	\$ 300,811		\$ 786,707	\$ 0.063
31	\$ 300,811	\$ 63,329		\$ 6,016	\$ 372,156		\$ 787,100	\$ 0.083
32	\$ 372,156	\$ 63,362		\$ 7,443	\$ 444,961		\$ 787,493	\$ 0.083
33	\$ 444,961	\$ 63,395		\$ 8,899	\$ 519,255		\$ 787,887	\$ 0.083
34	\$ 519,255	\$ 63,427		\$ 10,385	\$ 593,068		\$ 788,281	\$ 0.083
35	\$ 593,068	\$ 63,460	\$ 54,238	\$ 10,817	\$ 617,107		\$ 788,675	\$ 0.083
36	\$ 617,107	\$ 81,274		\$ 12,342	\$ 710,723		\$ 789,070	\$ 0.103
37	\$ 710,723	\$ 81,315		\$ 14,214	\$ 806,252		\$ 789,464	\$ 0.103
38	\$ 806,252	\$ 81,355		\$ 16,125	\$ 903,733		\$ 789,859	\$ 0.103
39	\$ 903,733	\$ 81,396		\$ 18,075	\$ 1,003,204		\$ 790,254	\$ 0.103
40	\$ 1,003,204	\$ 81,437	\$ 1,052,349	\$ -	\$ 32,292		\$ 790,649	\$ 0.103

Inflation Rate: **1.50%**  
Reinvestment Rate: **3.00%**

Invested Escrow Fees: **1.00%**

Initial Kwh Collectable: **716,760**  
Initial Cost per Kwh: **\$ 0.010**  
5 year step cost increase: **\$ 0.020**

## **APPENDIX A: PRIMARY OPERATOR STATEMENT OF QUALIFICATION**

The Primary Operator Statement of Qualification includes:

1. A description of the Primary Operator, its personnel and experience, and its responsibilities and functions. This discussion includes a description of the ability and history of the Primary Operator to operate an electric power generation facility and utility as a business and/or its history of operating other business enterprises, as well as a description of the Primary Operator's fiscal controls and accounting procedures. This discussion details organization history, management and structure; identification of key personnel, their experience and responsibilities; and, proposed organization of the electric utility management and operations, including an organizational chart.
2. A description of the Primary Operator's, if any, staffing or training needs.
3. A description of the training plan proposed by the Primary Operator to address current and future needs.

## **NATIVE VILLAGE OF KONGIGANAK/PUVURNAQ POWER COMPANY**

### **Overview**

The Native Village of Kongiganak is located on the western shore of Kuskokwim Bay, west of the mouth of the Kuskokwim River. The village, approximately 70 miles southwest of Bethel, is predominantly Yup'ik Eskimo and the inhabitants practice a commercial fishing and subsistence lifestyle.

Kongiganak was settled in the late 1960's by the inhabitants of Kwigillingok, a nearby village. Since that time, the population has steadily increased, and today there are approximately 359 residents. Most of the workforce is employed in the school, village government, stores, and commercial fishing. Approximately 30 residents hold commercial fishing permits.

The Native Village of Kongiganak has successfully administered and operated a number of social, community and other economic development projects. The following table lists the services that the Council provides as well as a summary of their active grants.

<b>SAMPLE CURRENT SERVICES AND ACTIVE GRANTS</b>	
<b><i>Services:</i></b>	Electric Utility
	Health Clinic
	Washeteria
	Village Public Safety Officer
	Water and Sewer
	Bulk Fuel Storage Operations
<b><i>Active Grants:</i></b>	New Bulk Fuel Tank Farm
	Water and Sewer Improvements
	Boardwalk Reconstruction
	New Street Lights
	Foundation Project

### **Description of Business History**

The Native Village of Kongiganak operates its community services and utility services through a five-member Village Council. The Council manages the electric utility (the Puvurnaq Power Company), washeteria and sewer. Currently, community residents and organizations pay for electricity and honey bucket haul service. The existing rate structures are as follows:

Electric - 40 cents/kilowatt-hour

Water and Sewer - \$15.00/month

Washers - \$3.00/\$4.00/\$6.00 per load and Dryers - \$0.25 per 5 minutes

## Description of Fiscal Controls and Accounting Procedures

Council Members and staff have authority to submit check requests, which must have supporting documents prior to being processed by the accounting department. All checks must be signed by two of the Council Members or authorized representatives. A copy of the check is attached to the supporting documents and filed at the Council office. The Council's fiscal year is January through December.

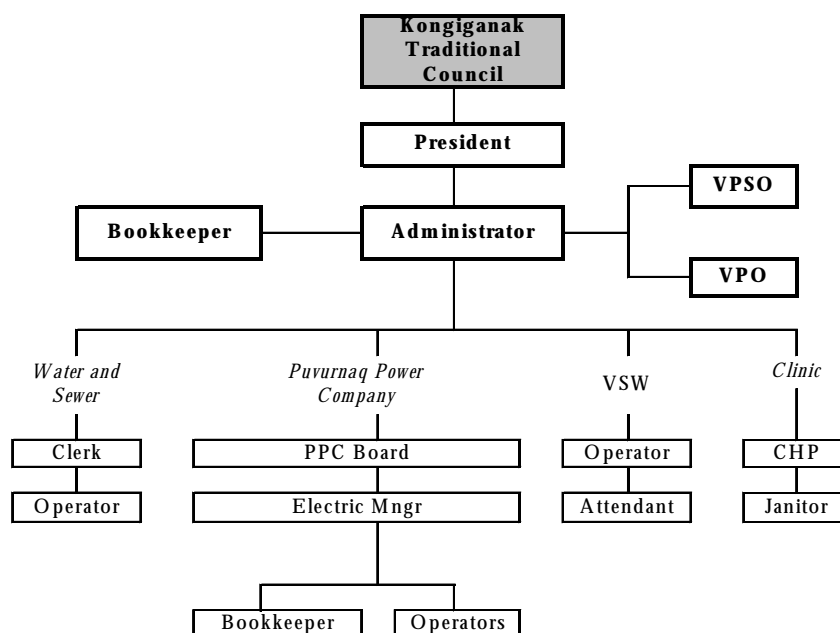
## Management and Structure

The Native Village of Kongiganak consists of five members. Mr. Tommy Phillip, Sr., is President and Agnes David is Vice President. Mr. Phillip has a diverse background in council affairs management and has served as its President since 1994. Below are the names and titles of the Council's 2002 Members.

NATIVE VILLAGE OF KONGIGANAK FY2002 COUNCIL MEMBERS	
Tommy Phillip, Sr., President	Martina Azean, Treasurer
Agnes David, Vice President	John P. Andrew, Sr., Member
Harold Azean, Secretary	

The following organizational chart shows the relationship between the various components of the Council's overall structure. At the apex of management is a Village Council comprised of the President and other members, all representing the village of Kongiganak.

### NATIVE VILLAGE OF KONGIGANAK ORGANIZATIONAL CHART



### Identification of Key Personnel

The Puvurnaq Power Company is managed by the Company's Board of Directors. There are five members on this Board, who serve staggered terms. Board members include:

PUVURNAQ POWER COMPANY FY2001 BOARD MEMBERS	
Roland Andrew, Chair	John P. Andrew, Sr., Vice Chair
Daniel Azean, Sr., Secretary	Mary Otto, Member
Edward K. David, Member	

Recently, the General Manager position of the utility was vacated and day-to-day operations currently are managed by Roland Andrew, Chair of the Board of Directors. Mr. Andrew will be involved in this project from the beginning and is the main contact for the Company. He will work with AEA and the Denali Commission to ensure the Company's role in the project timeline.

Zena Mute was recently appointed to the General Manager position by the Board. Previously, Ms. Mute served as the utility's bookkeeper for three years. She continues to work as bookkeeper during the week when Bernadette Otto is not working. Ms. Mute has 10 years of similar experience and has attended numerous workshops and training seminars for bookkeeping. See attached Electric Power Generation Facility Manager job description and resume.

Bernadette Otto works one-week on/off as bookkeeper for the power company. Ms. Otto has worked as an assistant bookkeeper for the utility for several years. Ms. Otto has also attended several training seminars and workshops for bookkeeping. See attached resume.

Glen Ivon is the head power plant operator and rotates one-week on/off with the substitute operator. He has been working as an operator since 1992. Mr. Ivon has his Power Plant Operator Certification and HAZWoper training from AVTEC in Seward, Alaska. See attached resume.

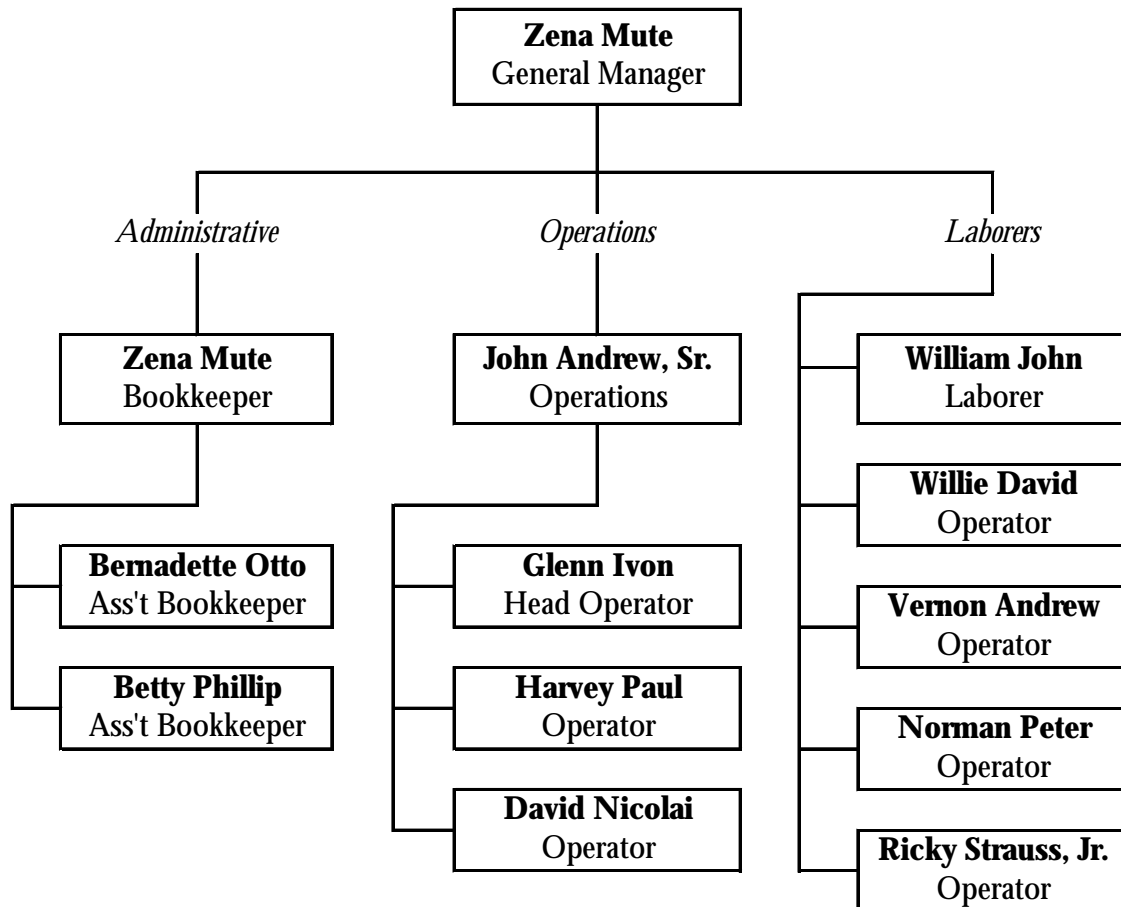
Rick Strauss is the substitute power plant operator and rotates one-week on/off with the head operator. Mr. Strauss has been the substitute operator since 1998 and has his Power Plant Operator Certification from AVTEC in Seward, Alaska. See attached resume.

Harvey Paul is the second power plant operator; however, he is on leave from his job through the summer of 2002.

## Organization of Puvurnaq Power Company Management and Operations

The following chart illustrates the staff relationships of the Puvurnaq Power Company.

### PUVURNAQ POWER COMPANY PROJECT STAFFING



### Staff Training Needs

Below is an initial list of training and assistance the Council has identified for the Council Members and/or staff:

- PCE reporting requirements and submissions
- General utility bookkeeping and accounting
- AVTEC Diesel Maintenance Program
- HAZWoper



### **Proposed Training Plan**

The Council staff will coordinate HAZWoper, Oil Spill Response Drills, and Bulk Fuel Facility Minor Maintenance as courses are offered by state agencies in the region.

Additionally, the Council will utilize training resources available through AEA and the Alaska Vocational Technical Center to ensure proper training of its personnel. The following is a summary of those resources:

- ***Alaska Energy Authority (AEA)***

The Alaska Energy Authority has developed a series of courses relating specifically to Bulk Fuel and Power Utility operations. These courses are taught through the Alaska Vocational Technical Center (AVTEC) in Seward:

Phone: (907)-269-3000

#### ***Contacts***

Bruce Tiedeman, Rural Energy Manager, Alaska Energy Authority/AIDEA

Address: 813 West Northern Lights Blvd., Anchorage, Alaska 99503

Phone: (907) 269-4641 Fax: (907) 269-3044

Web Address: [www.aidea.org/training.htm](http://www.aidea.org/training.htm)

Email address: [btiedeman@aidea.org](mailto:btiedeman@aidea.org)

Dick Harrell, Instructional Administrator, Alaska Vocational Technical Center

Address: P.O. Box 889 ~ 809 2<sup>nd</sup> Avenue, Seward, Alaska 99664

Phone: (907)-224-4162 ~ 1-800-478-5389 ~ fax (907) 224-4144

Web Address: [www.avtec.alaska.edu](http://www.avtec.alaska.edu)

Email: [dick\\_harrell@educ.state.ak.us](mailto:dick_harrell@educ.state.ak.us)

#### ***Technical Assistance Provided***

Facility Maintenance and Operations

#### ***Cost***

The state will pay for transportation to and from your community to the Alaska Vocational Technical Center (AVTEC) as well as lodging and \$10 per meal allowance while in transit to AVTEC. Furthermore, while at AVTEC the state will pay for tuition, deposit, room and board and training related materials.

Currently, the primary bulk fuel training provided by AEA is:

**Bulk Fuel Operator Training** – This is a 2-week program that covers how to safely run a tank system within a rural Alaskan community as well as covers information regarding the Alaska Energy Authorities Bulk Fuel loan program and how to recognize deficient tank systems.

The following courses are anticipated for the future:

**Itinerant Training** – This course will provide follow-up onsite training following the AVTEC Bulk Fuel Operator Training course. The Alaska Energy Authority (AEA) staff will conduct all training. It is anticipated that 6 communities will be chosen as test sites or demonstration projects.

**Oil Spill Response Training** – This course will be taught on-site and have the participation of the Alaska Energy Authority (AEA), Department of Environmental Conservation (DEC), Environmental Protection Agency (EPA) and the US Coast Guard. This course is tentatively targeted to begin Summer-2002.

- ***Alaska Vocational Technical Center (AVTEC)***

The Alaska Vocational Technical Center (AVTEC) is located in Seward Alaska approximately 120 miles south of Anchorage via the Seward Highway. In addition to offering onsite training and courses AVTEC staff also provide off-site training.

***Contact***

Admissions Office

Address: P.O. Box 889 ~ 809 2<sup>nd</sup> Avenue, Seward, Alaska 99664

Phone: (907)-224-4152 ~ 1-800-478-5389 ~ fax (907) 224-4143

Web Address: [www.avtec.alaska.edu](http://www.avtec.alaska.edu)

***Technical Assistance Provided***

Skilled Labor

Business Administration

Facility Maintenance and Operations

***Cost***

Fees for courses vary based on the specific program. An estimated fee for various programs has been included next to the listing of programs offered. The estimated fees include tuition, activity fee, security deposit, room and board, and books and supplies. Broken out these costs total - activity fee (\$25), security deposit (\$50), and room and board (\$20/day). The tuition, books and supplies vary in cost according to the course and course length.

The following programs and courses are offered relating to **Skilled Labor**:

**Construction Machinery and Diesel Engine Technology** – This program teaches students the skills and competencies of servicing, maintaining, and repairing construction machinery and diesel engines. Approximately 40 percent of the course is classroom instruction with the remainder being shop work. Four certification levels can be obtained within the program. The entire course will cost an estimated \$7,280 and take approximately 40 weeks or 1379 hours.

Basic course content includes: tire repair; basics of equipment operation; chassis components; differentials; transmissions; brakes; electrical systems; hydraulic systems;

introduction to gas and arc welding; diesel engine operation and tuning; precision measurement; disassembly and reassembly of diesel engines; fuel injection systems and governors, including electronically injected diesels; mathematics; industrial first aid; job search skills; and, shop safety.

**Welding Technology** – This program teaches students the skills necessary to successfully pass the AWS-D1.1 Structural Certification Test and become employed in the welding and fabrication industry. Certificates can be obtained in; Combination Welder, Welder SMAW, Wire-Feed Welder, Aluminum Welder, and Welder Helper. The entire course will cost an estimated \$5,260 and take approximately 20 weeks or 700 hours.

Basic course content includes: O.A.W. (Oxyacetylene Welding); S.M.A.W. (Stick electrode); G.M.A.W. (MIG); G.T.A.W. (TIG); shop safety; industrial first aid and CPR and job search skills.

**Industrial Electricity** – This program prepares students for entry-level positions in the field of industrial electricity. The course is broken into three parts; classroom presentation, experimental lab work, and electrical maintenance shop work. Four certificates can be obtained, Industrial Controls Technician, Industrial Electrical Technician, Electrical Apprentice, and Electrical Helper. The entire course will cost an estimated \$8,175 and can take up to 40 weeks or 1400 hours depending on the certification level.

Basic course content includes: electrical theory and wiring practices; electrical construction and national electrical code, industrial process automation, and job search and interview skills.

The following program and courses are offered relating to **Business Administration**:

**Business and Office Technology** – This program is an individualized, self-paced program. The following certificate levels can be obtained within the program, Accounting Clerk, Administrative Assistant, General Business/Office Assistant, and Business/Office Clerk. The entire course will cost an estimated \$6,855 and take approximately 35 weeks or 1225 hours.

Basic course content includes: Computer operations and software applications; Keyboarding and document processing; Proofreading and editing; Office procedures and office machines; Machine transcription; Accounting and record keeping; Business English and mathematics; Job and interview preparation; and, Internship training.

The following programs are offered relating to **Facility Maintenance and Operations**:

**Facility Maintenance/Construction Trades** – This program prepares students for installation, maintenance, service, repair and diagnostics to maintain installations and repair numerous types of facility equipment. Approximately 50 percent of the course is classroom instruction with the remainder being hands on training. Two certificates can be obtained:

Building Maintenance Repairer and Building Maintenance Repairer Helper. The entire course will take approximately 38 weeks or 1316 hours.

The main courses of study are carpentry, plumbing, heating and electrical. Basic course content includes: Carpentry (blueprint reading, power tools and hand tools, framing, sheetrock, structural repair, foundations); Plumbing (names of fittings, join pipe, repair and replace fixtures); Heating (proper cleaning, troubleshooting, preventative maintenance); and, Electrical (electrical theory, residential wiring, electrical troubleshooting, national electrical code, blueprints, schematics).

**Facility Maintenance/Mechanical** – This program prepares students for installation, maintenance, service, repair and diagnostics of HVAC/R equipment. Approximately 45 percent of the course is classroom instruction with the remainder being hands on training. Six certificates can be obtained: Plumbing and Heating Technician; Plumbing and Heating Repairer; Plumbing and Heating Assistant Repairer; HVAC/R Technician; HVAC/R Unit Repairer; HVAC/R Helper. The entire course will take approximately 36 weeks or 1260 hours.

Basic course content includes: electrical theory; troubleshooting and repair; reading blueprints and schematics; electrical circuits and controls; testing circuits, system design; retrofitting systems; heat loads; installation techniques; heat pumps; oil, gas and kerosene heating systems; domestic refrigerators and freezers; small hermetic systems; refrigeration systems; heating and cooling systems; introductions to carpentry, residential wiring and computers, and industrial first aid.

**Power Plant Operation** – This program prepares students for employment within a power plant. Approximately 60 percent of the course is spent operating and maintaining diesel generator sets representative of installations in rural Alaska with the remainder of time spent in classroom instruction. Certificates can be obtained in Diesel Plant Operator and Assistant Diesel Plant Operator. The entire course will cost an estimated \$1,935 and take approximately 8 weeks or 280 hours.

Basic course content includes: engine theory, maintenance, and troubleshooting; electrical system theory maintenance and troubleshooting; generator theory and maintenance; introduction to electrical distribution systems; operation of diesel electric sets; control panels; paralleling generator sets; load management; fuel management; waste heat recovery; plant management skills; power plant safety; industrial first aid and CPR; and job search skills.

## **RESUMES/JOB DESCRIPTION**

Puvurnaq Power Company  
P.O. Box 5009  
Kongiganak, Alaska 99569  
Work 907-557-5614  
Fax 907-557-5614

# Zena Mute

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## Employment

### **Puvurnaq Power Company**

**2002-Present General Manager**

**1999- Present Bookkeeper**

Manages and coordinates the day-to-day activities of the Electric Power Facility's operations and maintenance. Develops and maintains all administrative and financial systems, develops program budgets, prepares all reports for compliance with government agencies, assists with Board of Directors meetings' agendas and minutes. Reports directly to the Board of Directors.

## Previous Employment

### **Native Village of Kongiganak**

**1998-1999 Bookkeeper**

### **A&L Variety Store in Kongiganak**

**1997-1999 General Manager**

### **AVCP in Bethel**

**1996 Accounting Department**

### **Puvurnaq Power Company**

**1988-1990 Bookkeeper**

## Education

1988 High School Diploma Dick R. Kiunya High Kongiganak, AK

## Training

2002 Village Management Training AEA

2001 Payroll SESP Northern Lights Chapter of APA School

2000 Quickbooks

2000 Utility Training AEA

## Skills

IBM Compatible computer specifically Microsoft Excel and Quickbooks



Puvurnaq Power Company  
P.O. Box 5009  
Kongiganak, Alaska 99569  
Work 907-557-5614  
Fax 907-557-5614

# Glen Ivon

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<b>Employment</b>	<b>Puvurnaq Power Company</b> <b>2000-Present Head Power Plant Operator</b> Responsible for inspection, operation and minor maintenance of Electric Power Facility.
<b>Previous Employment</b>	<b>Puvurnaq Power Company</b> <b>1992-2000 Power Plant Operator</b> Responsible for inspection, operation and minor maintenance of Electric Power Facility.  <b>Contract Laborer</b>
<b>Education</b>	1982 High School Diploma Dick R. Kiunya High Kongiganak, AK
<b>Training</b>	2001 HAZWoper Training AVTEC Seward, AK 2001 Bulk Fuel Training AVTEC Seward, AK 2000 Above Ground Storage Workshop AEA
<b>Community</b>	Volunteer Search and Rescue
<b>Skills</b>	HAZWoper Power Plant Minor Maintenance & Repair Minor Electrical Laborer Small Engine Repair

Puvurnaq Power Company  
P.O. Box 5009  
Kongiganak, Alaska 99569  
Work 907-557-5614  
Fax 907-557-5614

# Rick Strauss

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<b>Employment</b>	<b>Puvurnaq Power Company</b> <b>1998-Present Substitute Power Plant Operator</b> Responsible for operations and minor maintenance of the Electric Power Facility.
<b>Previous Employment</b>	<b>1987-Present Contract Carpentry &amp; Laborer</b>  <b>Commercial Fishing</b> <b>1972-2000 Deckhand</b>  <b>Lower Kuskokwim School District</b> <b>1990-1992 Substitute Teacher</b>  <b>1976-1986 Cab Driver in Bethel, AK</b>
<b>Education</b>	1976 High School Diploma Bethel Regional High Bethel, AK
<b>Training</b>	1999 Power Plant Operator Certificate AVTEC Seward, AK
<b>Skills</b>	Minor Electrical Maintenance Carpentry Laborer

Puvurnaq Power Company  
P.O. Box 5009  
Kongiganak, Alaska 99569  
Work 907-557-5614  
Fax 907-557-5614

# Bernadette Otto

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<b>Employment</b>	<b>Puvurnaq Power Company</b> <b>1999-Present Bookkeeper</b> Responsible for accounts payable, accounts receivable, collections of late payments, and assisting the General Manager with budgets and reports.
<b>Previous Employment</b>	<b>2000-2001 Store Substitute Cashier</b> <b>1991-1998 Community Health Aide</b> <b>1997-1998 On-Call Community Health Aide</b>
<b>Education</b>	1990 High School Diploma Paul T. Albert High Tununak, AK
<b>Training</b>	1995 Community Health Aide Certification
<b>Skills</b>	Bookkeeping IBM Compatible computer specifically Microsoft Excel and Quickbooks Quick Learner and Adaptable

**PUVURNAQ POWER COMPANY  
JOB DESCRIPTION**

**ELECTRIC POWER GENERATION FACILITY MANAGER**

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Exempt (Y/N): No	Salary:
Division: Bulk Fuel	Location: Kongiganak
Employee:	Supervisor: Board of Directors
Approved By: Board of Directors	Date:

---

**SUMMARY:** Plans and directs activities of electric power generation facility operations. Ensures facility is maintained according to guidelines outlined in Business Plan, the Operations and Maintenance Manual, all manufacturers' recommendations for maintenance, and all State and Federal laws and regulations governing operation.

**ESSENTIAL DUTIES AND RESPONSIBILITIES** include the following. Other duties may be assigned.

Acts as point of contact for communications between the Puvurnaq Power Company, the Denali Commission, Regulatory Agencies, and other interested parties.

Interprets company policies and methods and develops specific operating procedures.

Delegates functional activities to workers and establishes supervisory schedules and responsibilities to ensure quality and timeliness of independent decisions required to provide continuous service to public and safety of workers.

Maintains operator training program and training records to ensure that trained operators are available to maintain sustained Facility operation.

Assists Puvurnaq Power Company with annual report of operations to the Denali Commission and other required reporting.

Implements the spill response and related regulatory plans and ensure that required spill response and related regulatory plans are updated and available on-site: Ensures the reliability of the spill response equipment, maintains the proper records, and conducts periodic spill drills.

Oversees proactive program to recognize, identify and correct operational problems within the facility. Investigates, evaluates, and determines best application of new developments in bulk fuel storage industry, and devises other means of securing maximum efficiency of personnel and equipment.

Directs maintenance of property records and upkeep of equipment and structures.

**Job Description**  
**Bulk Fuel Facility Manager**  
**Page 2**

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**SUPERVISORY RESPONSIBILITIES:**

Directly supervises employees in the Electric Power Generation Facility. Carries out supervisory responsibilities in accordance with the organization's policies and applicable laws. Responsibilities include interviewing, hiring, and training employees; planning, assigning, and directing work; appraising performance; addressing complaints and resolving problems.

**QUALIFICATIONS:** To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required.

***Education and/or Experience.*** Associate's degree (A. A.) or equivalent from two-year college or technical school; or six months to one year related experience and/or training; or equivalent combination of education and experience.

***Language Skills.*** Ability to read and interpret documents such as safety rules, operating and maintenance instructions, and procedure manuals. Ability to write routine reports and correspondence. Ability to speak effectively before groups of customers or employees of organization.

***Reasoning Ability.*** Ability to solve practical problems and deal with a variety of concrete variables in situations where only limited standardization exists. Ability to interpret a variety of instructions furnished in written, oral, diagram, or schedule form.

**PHYSICAL DEMANDS:** The job will be physically demanding; will be required to push, maneuver and sometimes lift heavy objects.

## **APPENDIX B: O&M AND R&R COST ESTIMATE**

HMS #02010(B)

FINAL SUBMITTAL  
POWER PLANT OPERATION & MAINTENANCE  
AND REPLACEMENT & RENEWAL COSTS  
KONGIGANAK, ALASKA

COST CONSULTANT

HMS Inc.  
4103 Minnesota Drive  
Anchorage, Alaska 99503  
(907) 561-1653  
(907) 562-0420 FAX

CLIENT

AEA  
813 W. Northern Lights Blvd.  
Anchorage, Alaska 99503  
  
March 1, 2002

IEEE Project No.: 02010(B)

## NOTES REGARDING THE PREPARATION OF THIS ESTIMATE

These Operations/Maintenance and Replacement/Renewal costs are based on Kongiganak Power Plant Facility conceptual drawings and do not include costs that could incur due to unexpected events such as natural disaster, vandalism, etc.

Each work item is priced using utility maintenance staff or "Force Account" local labor with exception of major testing, replacement, etc., which are priced using outside consultant/contractor rates, per diem and travel costs. "Force Account" labor rates are assumed as an average hourly rate for each village scenario.

O&M costs are established on yearly basis in 2002 dollars and should be projected to the initial 40 years of the facility using appropriate inflation factor over next 40 years.

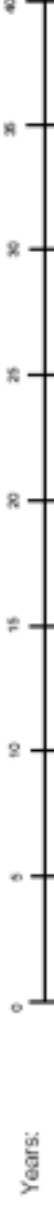
Renewal costs are based on repairing power plant building and equipment every two to eight times over 40 years.

Replacement costs are based one to four times over 40 years.

Please note that this report excludes all work to the existing power plant and 4,000 LF (3") pipeline to bulk fuel tank farm.

### ESTIMATING ASSUMPTIONS

Operation/Maintenance Costs: All costs are on yearly basis for one time event only.



Renewal/Replacement Costs: Total cost column represents one time event only. Years in parentheses indicate number of times to be renewed/replaced. Therefore, the Business Plan should apply the total dollars and multiply by the number of years item to be renewed or replaced.

NOTE: The original draft has been revised to incorporate review comments made by the project manager.



POWER PLANT OPERATION AND MAINTENANCE AND REPLACEMENT AND RENEWAL COSTS  
KONGIGANDAK, ALASKA  
FINAL SUBMITTAL

PAGE 2

DATE: March 1, 2002

HMS Project No.: 02010(B)

**SUMMARY**

	One Time Cost	TOTAL COST (In 2002 Dollars)
A. Operations & Maintenance Costs (First Year)	16,698 x 40 Years =	\$ 667,915
B. Renewal Costs (Over 40 Years)		With Business Plan
C. Replacement Costs (Over 40 Years)		With Business Plan
<b>TOTAL O&amp;M AND RENEWAL/REPLACEMENT COSTS (2002 DOLLARS):</b>		<b>N/A</b>

NOTE: Items B and C costs are for multiple events over 40 years period. See Business Plan Table D for actual costs including inflation factor and number of occurrences/event.

KONGIGNAK, ALASKA

DATE: March 1, 2002

FINAL SUBMITTAL

RMS Project No.: 02010 (B)

A. Operations & Maintenance Costs (First Year)	QUANTITY		MATERIAL		LABOR			EQUIPMENT		TOTAL \$	
	No. of Units	Unit Meas	Unit Price	Cost \$	HR Unit	Total Hrs	Rate	Unit Price	Cost \$		
1. SITE MAINTENANCE											
Annual maintenance	12	Mos	50.00	600	6.000	72.000	16.42		1,182	1,782	
Building pad	13,500	SF								Included Above	
Boardwalk	900	SF								Included Above	
Steel grate ramps and steps	610	SF								Included Above	
TOTAL 1.:				600					1,182	1,782	
2. FUEL TANK, PIPELINES AND TRANSFORMER											
Check step-up transformers	3	EA			4.000	12.000	16.42		197	197	
Fuel delivery (12,000 gallon via pipeline)											
Perform minor repairs, replace faulty valves and gauges (1 tank	1	LOT	500.00	500	16.000	16.000	16.42		263	50.00	
										With Tank Farm	
TOTAL 2.:				500					463	50	1,010

POWER PLANT OPERATION AND MAINTENANCE AND REPLACEMENT AND RENEWAL COSTS  
KOHAIKANAK, ALASKA  
FINAL SUBMITTAL

PAGE 4

DATE: March 1, 2002

2002 Project No.: 22012 (B)

A. Operations & Maintenance Costs (First Year)	QUANTITY		MATERIAL		LABOR			EQUIPMENT		TOTAL \$
	No. of Units	Unit Measure	Unit Price	Cost \$	HM Unit	Total Hrs	Rate \$	Cost \$	Unit Price	Cost \$
A. Operations & Maintenance Costs (First Year)	No. of Units	Unit Measure	Unit Price	Cost \$	HM Unit	Total Hrs	Rate \$	Cost \$	Unit Price	Cost \$

3. OTHER COSTS

NOTE: Included with Business Plan Table B.

Operator training 1 EA  
Administration - clerical 12 Mos  
Administration - supervision 12 Mos  
Annual audit (in Anchorage) 1 LOT

Power plant insurance (1,440 SF building and gensets, switchgear, 12,000 gallon fuel tank, etc.) 1 EA

TOTAL 3.:

4. BUILDING SYSTEMS

Check the following and repair as necessary:

Steel piles and cross bracing for loose connections, settlement, e	17	EA	20.00	340	1.500	25.500	16.42	419	10.00	170	929
Floor structure	1,440	SF	0.05	72	0.020	28.800	16.42	473			545
Roof structure	1,632	SF	0.05	82	0.020	32.640	16.42	536			618

KONGIGANAK, ALASKA  
FINAL SUBMITTAL

DATE: March 1, 2002

HNS Project No.: 02010(B)

A. Operations & Maintenance Costs (First Year)	QUANTITY		MATERIAL		LABOR			EQUIPMENT		TOTAL \$
	No. of Units	Head	Unit Price	Cost \$	MH Unit	Total Hrs	Rate	Unit Price	Cost \$	
A. Operations & Maintenance Costs (First Year)	No. of Units	Head	Unit Price	Cost \$	MH Unit	Total Hrs	Rate	Unit Price	Cost \$	TOTAL \$
<b>A. BUILDING SYSTEMS (Continued)</b>										
Exterior walls metal siding and interior FRP	2,704	SP	0.07	189	0.013	35.152	16.42		577	766
10'0"x10'0" overhead door	1	EA	40.00	40	4.000	4.000	16.42		66	106
3'0"x7'0" single door	1	EA	15.00	15	1.000	1.000	16.42		16	31
3'6"x3'6" windows	2	EA	10.00	20	0.500	1.000	16.42		16	36
Metal roofing	1,632	SP	0.10	163	0.020	32.640	16.42		536	699
Interior stud/gypboard partition	744	SP	0.05	37	0.020	14.880	16.42		244	282
3'0"x7'0" single doors	3	EA	5.00	15	0.350	1.050	16.42		17	32
3'6"x8'0" window	1	EA	5.00	5	1.000	1.000	16.42		16	21
Clean floors	1,440	SP	0.10	144	0.030	43.200	16.42		709	853
Clean FRP wall finishes	3,360	SP	0.01	34	0.007	23.520	16.42		386	420
Ditto ceiling finishes	1,440	SP	0.01	14	0.007	10.080	16.42		166	180
Specialties	1	LOT			2.000	2.000	16.42		33	33
<b>TOTAL A.:</b>				<b>1,170</b>			<b>4,211</b>		<b>170</b>	<b>3,551</b>

POWER PLANT OPERATION AND MAINTENANCE AND REPLACEMENT AND RENEWAL COSTS  
KORDIGANAK, ALASKA  
FINAL SUBMITTAL

PAGE 6

DATE: March 1, 2002

RMS Project No.: 22111(3)

A. Operations & Maintenance Costs (First Year)	QUANTITY		MATERIAL			LABOR			EQUIPMENT		TOTAL \$
	No. of Units	Unit Measure	Unit Price	Cost \$	MH Unit	Total Hrs	Rate \$	Cost \$	Unit Price	Cost \$	
A. Operations & Maintenance Costs (First Year)	No. of Units	Unit Measure	Unit Price	Cost \$	MH Unit	Total Hrs	Rate \$	Cost \$	Unit Price	Cost \$	TOTAL \$
	No. of Units	Unit Measure	Unit Price	Cost \$	MH Unit	Total Hrs	Rate \$	Cost \$	Unit Price	Cost \$	TOTAL \$
<b>5. MECHANICAL</b>											
Check heating, ventilation and ducts, grilles, louvers and controls 1,440 SF 0.10 144 0.016 23.040 16.42 378 522											
Fire alarm and fire suppression system inspection and certification (outside contr 1 LOT 1000.00 1,000 16.000 75.00 1,200 2,200											
<b>TOTAL 5.:</b>				1,144				1,578			2,722
<b>6. ELECTRICAL</b>											
Check service and distribution 1,440 SF 0.013 18.720 16.42 307 307											
Change lamps/replace lenses (28 fixtures x 25¢) 7 EA 24.00 168 0.700 4.900 16.42 80 248											
Check devices, switches, etc. 1 LOT 6.000 6.000 16.42 99 99											
<b>TOTAL 6.:</b>				168				486			654

POWER PLANT OPERATION AND MAINTENANCE AND REPLACEMENT AND RENEWAL COSTS

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KONGIGNAK, ALASKA

FINAL SUBMITTAL

DATE: March 1, 2002

RMS Project No.: 02010 (B)

A. Operations & Maintenance Costs (First Year)	QUANTITY		MATERIAL		LABOR			EQUIPMENT		TOTAL \$
	No. of Units	Unit Meas	Unit Price	Cost \$	MH Unit	Total Hrs	Rate	Unit Price	Cost \$	
A. Operations & Maintenance Costs (First Year)	No. of Units	Unit Meas	Unit Price	Cost \$	MH Unit	Total Hrs	Rate	Unit Price	Cost \$	TOTAL \$
<b>7. POWER GENERATION SYSTEMS</b>										
Check 200 KW genset radiators, mufflers and additives	2	EA			18.000	36.000	16.42		591	591
Ditto 170 KW	1	EA			10.000	10.000	16.42		164	164
Ditto 140 KW	1	EA			8.000	8.000	16.42		131	131
Ditto switchgear and controls	1	EA			12.000	12.000	16.42		197	197
Change oil, oil filter, fuel filter and air filters in generator engine	1	EA	3500.00	3,500	24.000	24.000	16.42		394	3,894
<b>TOTAL 7.1</b>				<b>3,500</b>					<b>1,478</b>	<b>4,978</b>

7,302

515.122 499.12

8,196

POWER PLANT OPERATION AND MAINTENANCE AND REPLACEMENT AND RENEWAL COSTS  
KONGIGNAK, ALASKA  
FINAL SUBMITTAL

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DATE: March 1, 2002

ISAC Project No.: 02010 (B)

A. Operations & Maintenance Costs (First Year)	QUANTITY		MATERIAL		LABOR			EQUIPMENT		TOTAL \$
	No. of Units	Unit Means	Unit Price	Cost \$	MH Unit	Total Hrs	Rate \$	Cost \$	Unit Price	Cost \$
A. Operations & Maintenance Costs (First Year)	No. of Units	Unit Means	Unit Price	Cost \$	MH Unit	Total Hrs	Rate \$	Cost \$	Unit Price	Cost \$
SUMMARY (YEARLY)										
1. SITE MAINTENANCE										\$ 1,782
2. FUEL TANK, PIPELINES AND TRANSFORMER										1,010
3. OTHER COSTS										--
4. BUILDING SYSTEMS										5,551
5. MECHANICAL										2,722
6. ELECTRICAL										654
7. POWER GENERATION SYSTEMS										4,978
TOTAL IN PRESENT DOLLARS/YEAR:										\$ 18,698

KONGIGANAK, ALASKA

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DATE: March 1, 2002

INS Project No.: 02010(B)

B. Renewal Costs (Over 40 Years)	QUANTITY		MATERIAL		LABOR			EQUIPMENT		TOTAL \$
	No. of Units	Unit Head	Unit Price	Cost \$	NH Unit	Total Hrs	Rate	Unit Price	Cost \$	
<u>1. SITE</u>										
Repair boardwalks (at 5, 10, 15, 25, 30 and 35 years - 6 times)	900	SP	0.30	270	0.060	54.000	17.85	0.15	135	1,369
Minor repairs to steel grate ramps and steps (ditto)	610	SP	0.45	275	0.080	48.800	17.85	0.25	153	1,299
<b>TOTAL 1.:</b>				<b>545</b>					<b>288</b>	<b>2,667</b>
<u>2. FUEL PUMPS, PIPELINE AND ELECTRICAL</u>										
Replace pump (at 10, 20, 30 and 40 years - 4 times, 1 tank)	1	EA	1200.00	1,200	14.000	14.000	17.85	100.00	100	1,550
Replace valves and gauges (at 5, 15, 25 and 35 years - 4 times)	1	LOT	300.00	300	6.000	6.000	17.85	30.00	30	437
Refurbish electrical systems for fuel tank and pump (at 10, 20, 30 and 40 years - 4 times)	1	LOT	300.00	300	16.000	16.000	17.85	100.00	100	686
<b>TOTAL 2.:</b>				<b>1,800</b>					<b>230</b>	<b>2,673</b>



KONGIGANAK, ALASKA

DATE: March 1, 2002

FINAL SUBMITTAL

RMS Project No.: 02018(B)

B. Renewal Costs (Over 40 Years)	QUANTITY		MATERIAL		LABOR			EQUIPMENT		TOTAL \$
	No. of Units	Unit Meas	Unit Price	Cost \$	MH Unit	Total Hrs	Rate	Cost \$	Unit Price	Cost \$

B. Renewal Costs (Over 40 Years)	QUANTITY		MATERIAL		LABOR			EQUIPMENT		TOTAL \$
	No. of Units	Unit Meas	Unit Price	Cost \$	MH Unit	Total Hrs	Rate	Cost \$	Unit Price	Cost \$

3. BUILDING SYSTEMS

Minor repairs to floor system (at 10, 20, 30 and 40 years - 4 times)	1,440	SP	0.15	216	0.030	43.200	17.85	771		987
Ditto roof structure (ditto)	1,632	SP	0.10	163	0.020	32.640	17.85	583		746
Repair exterior metal siding (at 5, 10, 15, 25, 30 and 35 years - 6 times)	2,704	SP	0.20	541	0.030	81.120	17.85	1,448		1,989
Ditto interior plywood/FRP (ditto)	2,704	SP	0.10	270	0.020	54.080	17.85	965		1,236
Repair/caulk 10'0"x10'0" overhead door (ditto)	1	EA	50.00	50	4.000	4.000	17.85	71		121
Repair/caulk 3'0"x7'0" exterior door (at 5, 10, 15, 25, 30 and 35 years - 6 times)	1	EA	12.00	12	1.500	1.500	17.85	27		39
Ditto 3'6"x3'6" windows (ditto)	2	EA	8.00	16	1.000	2.000	17.85	36		52
Repair metal roofing and flashings (at 10, 20 and 35 years - 3 times)	1,632	SP	0.25	408	0.040	65.280	17.85	1,165		1,573
Change interior door hardware (at 10 and 30 years - 2 times)	3	EA	265.00	795	1.500	4.500	17.85	80		875

POWER PLANT OPERATION AND MAINTENANCE AND REPLACEMENT AND RENEWAL COSTS  
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B. Renewal Costs (Over 40 Years)	QUANTITY		MATERIAL		LABOR			EQUIPMENT		TOTAL \$
	No. of Units	Unit Meas	Unit Price	Cost \$	HR Unit	Total Hrs	Rate \$	Unit Price \$	Cost \$	
3. BUILDING SYSTEMS (Continued)	QUANTITY		MATERIAL		LABOR			EQUIPMENT		TOTAL \$
	No. of Units	Unit Meas	Unit Price	Cost \$	HR Unit	Total Hrs	Rate \$	Unit Price \$	Cost \$	
	Replace acoustical glazing and seals on 3'6"x8'0" interior windows (at 20 years - 1 time)									
	28	SP	27.50	770	0.370	10.360	17.85	185		955
	Paint steel plate floors (at 5, 10, 15, 25, 30 and 35 years - 6 times)									
	1,440	SP	0.18	259	0.040	57.600	17.85	1,028		1,287
	Patch and clean FRP walls (at 5, 10, 15, 25, 30 and 35 years - 6									
	992	SP	0.22	218	0.050	49.600	17.85	885		1,104
	Ditto ceilings (ditto)									
	1,440	SP	0.15	216	0.030	43.200	17.85	771		987
Repair specialties (at 10, 20, and 30 years - 3 times)										
1	LOT	50.00	50	1.000	1.000	17.85	18			
TOTAL 3.:			3,985		6,034			11,951		

DATE: March 1, 2002

[illegible]

## 4. MECHANICAL. (Continued)

Repair fire suppression system and charge FM containers (at 10 and 30 years - 2 times)

## 5. ELECTRICAL

Replace panel circuit breakers, fuses, etc. (at 10 and 30 years - 2 tir

TOTAL	5.00	1.553	3.453
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POWER PLANT OPERATION AND MAINTENANCE AND REPLACEMENT AND RENEWAL COSTS  
KONGIGANEK, ALASKA  
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DATE: March 1, 2002

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B. Renewal Costs (Over 40 Years)	QUANTITY		MATERIAL		LABOR			EQUIPMENT		TOTAL \$	
	No. of Units	Unit Meas	Unit Price	Cost \$	HR Unit	Total Hrs	Rate \$	Cost \$	Unit Price		Cost \$
B. Renewal Costs (Over 40 Years)	QUANTITY		MATERIAL		LABOR			EQUIPMENT		TOTAL \$	
	No. of Units	Unit Meas	Unit Price	Cost \$	HR Unit	Total Hrs	Rate \$	Cost \$	Unit Price	Cost \$	
	1	LOT	30000.00	30,000	200.000	200.000	75.00	15,000	3000.00	3,000	48,000
	1	LOT	12000.00	12,000	80.000	80.000	75.00	6,000	1500.00	1,500	19,500
	1	LOT	10000.00	10,000	70.000	70.000	75.00	5,250	1500.00	1,500	16,750
6. POWER GENERATION SYSTEMS											
Overhaul 200 KW genset (at 10 and 30 years - 2 times, 2 each)											
Ditto 170 KW (ditto, 1 each)											
Ditto 140 KW (ditto, 1 each)											
Refurbish switchgear and controls, instrumentation and recalibrate (at 10 and 30 years - 2 times)											
Top end overhaul (every year except 1, 10, 20, 30, 40 - 35 ti											
Change battery, alternator, etc. (every 4-years except 10, 20, 30 and 40 years - 6 times)											
TOTAL 6.1											
				61,000				39,525	6,500	107,025	

POWER PLANT OPERATION AND MAINTENANCE AND REPLACEMENT AND RENEWAL COSTS

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FINAL SUBMITTAL

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RMS Project No.: 03010(B)

B. Renewal Costs (Over 40 Years)	QUANTITY		MATERIAL		LABOR			EQUIPMENT		TOTAL \$
	No. of Units	Unit Hours	Unit Price	Cost \$	HR Unit	Total Hrs	Rate	Unit Price	Cost \$	
B. Renewal Costs (Over 40 Years)	QUANTITY No. of Units	Unit Hours	MATERIAL Unit Price	Cost \$	HR Unit	Total Hrs	Rate	EQUIPMENT Unit Price	Cost \$	TOTAL \$
1. SITE										\$ 2,667
2. FUEL PUMPS, PIPELINE AND ELECTRICAL										2,673
3. BUILDING SYSTEMS										11,951
4. MECHANICAL										7,484
5. ELECTRICAL										3,453
6. POWER GENERATION SYSTEMS										107,025
TOTAL IN PRESENT DOLLARS OVER 40 YEARS (1 TIME EVENT):										\$ 135,252

SUMMARY

POWER PLANT OPERATION AND MAINTENANCE AND REPLACEMENT AND RENEWAL COSTS  
KONGIGANAK, ALASKA  
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8868 Project No.: 02010 (B)

C. Replacement Costs (Over 40 Years)	QUANTITY		MATERIAL		LABOR			EQUIPMENT		TOTAL \$
	No. of Units	Unit Meas	Unit Price	Cost \$	MH Unit	Total Hrs	Rate	Unit Price	Cost \$	
<b>1. SITE</b>										
Replace boardwalks (at 20 and 40 years - 2 times)	900	SF	5.50	4,950	0.250	225.000	17.85	1.00	900	9,866
Replace steel grate ramp and steps (at 40 years - 1 time)	610	SF	32.50	19,825	0.400	244.000	17.85	1.00	610	24,790
<b>TOTAL 1.:</b>				24,775			8,392		1,510	34,657
<b>2. FUEL TANK AND ELECTRICAL</b>										
Replace 12,000 gallon fuel tank (at 40 years - 1 time)	1	EA	30000.00	30,000	64.000	64.000	75.00	4,800	1200.00	36,000
Replace electrical system for fuel tank (at 20 and 40 years - 2 tir	1	LOT	3500.00	3,500	50.000	50.000	75.00	3,750	250.00	7,500
<b>TOTAL 2.:</b>				33,500			8,550		1,450	43,500
<b>3. BUILDING SYSTEMS</b>										
Shim piles and replace bracing (at 20 and 40 years - 2 times)	17	EA	255.00	4,335	6.000	102.000	17.85	1,821	215.00	9,811

POWER PLANT OPERATION AND MAINTENANCE AND REPLACEMENT AND GENERAL COSTS  
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C. Replacement Costs (Over 40 Years)	QUANTITY		MATERIAL		LABOR			EQUIPMENT		TOTAL \$
	No. of Units	Unit Meas	Unit Price	Cost \$	ME Unit	Total Hrs	Rate	Cost \$	Unit Price	Cost \$

C. Replacement Costs (Over 40 Years)	QUANTITY		MATERIAL		LABOR			EQUIPMENT		TOTAL \$
	No. of Units	Unit Meas	Unit Price	Cost \$	MH Unit	Total Hrs	Rate	Cost \$	Unit Price	Cost \$

3. BUILDING SYSTEMS (Continued)

Upgrade floor system (at 20 and 40 years - 2 times)	1,440	SF	1.00	1,440	0.100	144.000	17.85	2,570		4,010
Ditto roof structure (ditto)	1,632	SF	0.75	1,224	0.080	130.560	17.85	2,330		3,554
Replace exterior metal siding (at 40 years - 1 time)	2,704	SF	4.25	11,492	0.170	459.680	17.85	8,205		19,697
Replace exterior wall plywood and insulation (at 40 years - 1 time)	2,704	SF	1.25	3,380	0.070	189.280	17.85	3,379		6,759
Replace 10'0"x10'0" overhead door (at 20 and 40 years - 2 times)	1	EA	1850.00	1,850	8.000	8.000	17.85	143		1,993
Ditto 3'0"x7'0" single door (dit	1	EA	785.00	785	3.000	3.000	17.85	54		839
Replace 3'6"x3'6" exterior windows (ditto)	2	EA	380.00	760	3.000	6.000	17.85	107		867
Replace metal roofing and insulation (at 15 and 35 years - 2 times)	1,632	SF	5.70	9,302	0.200	326.400	17.85	5,826		15,129
Replace 3'0"x7'0" interior doors (at 20 and 40 years - 2 times)	3	EA	655.00	1,965	2.500	7.500	17.85	134		2,099

POWER PLANT OPERATION AND MAINTENANCE AND REPLACEMENT AND GENERAL COSTS  
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C. Replacement Costs (Over 40 Years)	QUANTITY		MATERIAL		LABOR			EQUIPMENT		TOTAL \$	
	No. of Units	Unit Meas	Unit Price	Cost \$	MH Unit	Total Hrs	Rate \$	Unit Price	Cost \$		
3. BUILDING SYSTEMS (Continued)											
C. Replacement Costs (Over 40 Years)	28		SP	35.00	980	0.400	11.200	17.85	200	1,180	
	Replace 3'6"x8'0" window unit (at 40 years - 1 time)										
	3		BA	20.00	60	1.250	3.750	17.85	67	127	
	Paint trim and doors (at 20 and 40 years - 2 times)										
	2,160		SP	3.70	7,992	0.110	237.600	17.85	4,241	12,233	
Replace PRP paneling (at 20 and 40 years - 2 times)											
1		LOT	250.00	250	3.000	3.000	17.85	54	304	304	
Replace specialties (at 40 years - 1 time)											
TOTAL 3.:				45,815			25,131	3,855		78,601	
4. MECHANICAL											
C. Replacement Costs (Over 40 Years)	1		LOT	35000.00	35,000	160.000	160.000	75.00	12,000	1,200	48,200
	Replace major mechanical equipment (at 40 years - 1 time)										
	2		1,440	SP	4.50	6,480	0.040	57.600	75.00	4,320	10,800
Refurbish grilles, louvers, ducts and controls (at 20 and 40 years - 2 times)											
1		LOT	22500.00	22,500	90.000	90.000	75.00	6,000		29,500	
Replace FM200 fire suppression system (at 40 years - 1 time)											
TOTAL 4.:				63,980			22,320	1,200		87,500	



POWER PLANT OPERATION AND MAINTENANCE AND REPLACEMENT AND RENEWAL COSTS  
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IMS Project No.: 01010180

C. Replacement Costs (Over 40 Years)	QUANTITY		MATERIAL		LABOR			EQUIPMENT		TOTAL \$
	No. of Units	Unit Meas	Unit Price	Cost \$	MH Unit	Total Hrs	Rate \$	Unit Price \$	Cost \$	
5. ELECTRICAL										
Replace panels, disconnect switches, motor controls, etc. (at 20 and 40 years - 2 times)	1	LOT	7500.00	7,500	80.000	80.000	75.00	6,000	3000.00	16,500
Replace conductors only (at 40 years - 1 time)	1	LOT	2200.00	2,200	48.000	48.000	75.00	3,600		5,800
Replace light fixtures (at 20 and 40 years - 2 times)	28	EA	152.50	4,270	1.500	42.000	75.00	3,150		7,420
Replace devices (ditto - 2 times)	40	EA	18.00	720	0.500	20.000	75.00	1,500		2,220
Replace fire alarm system (at 20 and 40 years - 2 times)	1,440	SP	4.70	6,768	0.040	57.600	75.00	4,320		11,088
Replace transformers (at 40 years - 1 time)	3	EA	7200.00	21,600	32.000	96.000	75.00	7,200		28,800
<b>TOTAL 5.:</b>				<b>43,058</b>				<b>25,770</b>	<b>3,000</b>	<b>71,828</b>

POWER PLANT OPERATION AND MAINTENANCE AND REPLACEMENT AND RENEWAL COSTS  
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DATE: March 1, 2002

HMS Project No.: 02010 (2)

C. Replacement Costs (Over 40 Years)	QUANTITY		MATERIAL		LABOR			EQUIPMENT		TOTAL \$
	No. of Units	Unit Meas	Unit Price	Cost \$	MH Unit	Total Hrs	Rate	Unit Price	Cost \$	
5. POWER GENERATION SYSTEM										
C. Replacement Costs (Over 40 Years)										
Replace 200 KW generator (at 20 and 40 years - 2 times, 2 each)	1	LOT	105000.00	105,000	240.000	240.000	75.00	18,000	6000.00	6,000
										129,000
Ditto 170 KW (ditto, 1 each)	1	LOT	47000.00	47,000	110.000	110.000	75.00	8,250	1500.00	1,500
										56,750
Ditto 140 KW (ditto, 1 each)	1	LOT	39000.00	39,000	80.000	80.000	75.00	6,000	1000.00	1,000
										46,000
Replace switchgear and controls complete (at 40 years - 1 time)	1	LOT	28000.00	28,000	150.000	150.000	75.00	11,250	700.00	700
										39,950
Replace equipment feeders and conductors (at 20 and 40 years - 2 times)	1	LOT	5000.00	5,000	100.000	100.000	75.00	7,500		
										12,500
TOTAL \$:				224,000				51,000	9,200	284,200
SUMMARY										
1. SITE										\$ 34,657
2. FUEL TANK AND ELECTRICAL										43,500
3. BUILDING SYSTEMS										78,601
4. MECHANICAL										87,500
5. ELECTRICAL										71,828
6. POWER GENERATION SYSTEM										284,200
TOTAL RENEWAL:										\$ 600,286

## **ADDITIONAL RELATED AND ATTACHED DOCUMENTS**

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- 1. Secondary Operator Agreement**
- 2. Site Control Documents**
- 3. Grant Agreement**
- 4. R&R Fund Account – Sample Documents**
- 5. Insurance Quote**

## **1. SECONDARY OPERATOR AGREEMENT**

**SECONDARY OPERATOR AGREEMENT  
FOR THE PUVURNAQ POWER COMPANY ELECTRIC UTILITY**

**WHEREAS**, the Denali Commission (“Commission”) has provided, or will provide, funds to the Alaska Energy Authority (“Authority”) for a grant by the Authority to the Native Village of Kongiganak, operating as the Puvurnaq Power Company, for the upgrading of electric power generation facilities at Kongiganak, Alaska (the “Facility”) owned by the Native Village of Kongiganak; and

**WHEREAS**, grant funds may also be provided by HUD, and the financial aspects of both grants will be managed and the Facility construction will be overseen by the Commission (which term shall include HUD in this Secondary Operator Agreement for the Utility, hereinafter the “Agreement”); and

**WHEREAS**, the Commission has adopted Sustainability Criteria that apply to the use of Commission funds for the Facility, in order to ensure the long-term economic sustainability of the Utility; and

**WHEREAS**, the Commission and the Native Village of Kongiganak have agreed to a Business Plan consistent with the Sustainability Criteria for the operation of the Utility, as contained in Puvurnaq Power Company Electric Utility Business Operating Plan dated June 1, 2002 (“Plan”); and

**WHEREAS**, the Plan specifies that the Native Village of Kongiganak shall act as the Primary Operator of the Utility, as specified therein, and shall operate the Utility in compliance with the terms and conditions of the Plan; and

**WHEREAS**, the Commission and the Native Village of Kongiganak agree that, if the Primary Operator is not operating the Utility in compliance with the terms and conditions of the Plan, the Commission may designate a Secondary Operator to assist the Primary Operator or to take over such functions of the Utility operations that the Commission determines are necessary for such time as it determines is necessary, pursuant to the terms and conditions of this Secondary Operator Agreement;

**NOW THEREFORE**, the Commission and the Native Village of Kongiganak agree as follows, in consideration for the mutual promises contained herein and the benefits to the parties resulting from the completion and operation of the Utility:

1. The Primary Operator shall operate the components of the Utility specified in the Plan in accordance with the terms and conditions of the Plan and the requirements contained herein.
2. In addition to, and consistent with its duties specified in the Plan, the Primary Operator shall, in a timely manner:
  - 2.1 properly establish and maintain accurate books and records;
  - 2.2 account for, bill for, and use its best efforts to collect all sales and all other receivables;

- 2.3 deposit moneys into the appropriate accounts, including deposits into the Operations & Maintenance Fund account as well as deposits into the Renewal & Replacement invested escrow account (as such accounts are defined in the Plan);
  - 2.4 maintain adequate cash reserves;
  - 2.5 obtain annual audits showing the absence of any management or financial irregularities;
  - 2.6 perform necessary maintenance of and repairs to the Utility equipment;
  - 2.7 provide or obtain necessary training for Utility operations; and
  - 2.8 meet its financial obligations.
3. If the Commission determines, in the exercise of its sole discretion, that the Primary Operator has failed or is unable to operate the Utility in accordance with the Plan and this Agreement and that this failure or inability significantly threatens the long-term economic sustainability of the Utility, the Commission may contract with and utilize a Secondary Operator.
  4. The Commission has the sole right to transfer the full custody and control of the assets and business operations of the Utility, including but not limited to, the cash, receivables, and inventory of the Utility, to the Secondary Operator and assign the Secondary Operator responsibility for partial or total management of the Utility.
    - 4.1 The Commission may appoint the Secondary Operator to assist the Primary Operator in some or all aspects of the Utility operations or to take over some or all aspects of Utility operation from the Primary Operator, in such a manner and for such period of time as the Commission determines to be necessary and appropriate for operation of the Utility in compliance with the Plan and the long-term economic sustainability of the Utility. (For example, the Secondary Operator may be asked to assist the Primary Operator for a short period of days or weeks in bringing certain aspects of the operations back into compliance. Alternatively, the Secondary Operator may be asked to replace the Primary Operator as Utility operator. The foregoing are intended only as illustrative examples, without limiting the effect of this Agreement.)
    - 4.2 If the Commission utilizes a Secondary Operator, the Primary Operator will transfer the complete control and authority over the following assets to the Secondary Operator: the books and records relating to the Utility operations, accounts receivable, and all account funds. The Primary Operator agrees to cooperate with the Commission and the Secondary Operator in the release of the stated assets and the transfer of operations to the Secondary Operator.
    - 4.3 The Secondary Operator will be entitled to reasonable compensation for its services. This compensation will, at a minimum, reimburse the Secondary Operator for any and all expenses associated with their duties as Utility operator, plus a reasonable profit. The profit will not exceed what is considered normal and customary for like service, as determined by the Commission in the exercise of its sole discretion.

- 4.4 The parties anticipate that, if a Secondary Operator is appointed, the Commission will appoint (To Be Determined). However, the parties acknowledge that (To Be Determined) may not exist or be willing to serve in this capacity at the time a Secondary Operator is needed, or other circumstances may prevent (To Be Determined) from serving as Secondary Operator. Therefore, the Native Village of Kongiganak acknowledges and agrees that the Commission may appoint any qualified entity or entities to serve as Secondary Operator. The Commission will consult with the Native Village of Kongiganak on the replacement to the Secondary Operator; however, the Commission maintains final approval authority for the replacement Secondary Operator.
- 4.5 The Commission will act reasonably and responsibly in its enforcement of the Plan and this Agreement and its designation of a Secondary Operator, consulting with the Native Village of Kongiganak and taking into account the needs and interests of the community of Kongiganak, as well as the general public interest. If the Commission employs the Secondary Operator, the Commission shall oversee the operations of the Secondary Operator to make sure that it is conducting its operations reasonably, in a cost-efficient manner, and consistent with the needs and interests of the community as well as the general public interest.
5. If a dispute or controversy arises between the parties to this Agreement or among the parties to an agreement with the Secondary Operator, application or enforcement of this Agreement shall be decided through mediation. If mediation is unsuccessful, any party to this Agreement may bring an action to resolve the dispute in the Superior Court of the State of Alaska.
6. This Agreement may be executed simultaneously in two (2) or more counterparts, each of which will be considered an original, but all of which together will constitute one and the same instrument. The exchange of a fully executed Agreement (in counterparts or otherwise) by fax shall be sufficient to bind the parties to the terms and conditions of this Agreement.
7. No delay on the part of a party in the exercise of any right, power, or remedy shall operate as a waiver thereof, nor shall any single or partial exercise of any right, power, or remedy preclude other or further exercise thereof or the exercise of any other right, power, or remedy. No amendment, modification, or waiver of, or consent with respect to, any provision of this Agreement shall be effective unless it shall be in writing and signed and delivered by the parties hereto.
8. All notices, demands or requests required or allowed under this Agreement or applicable law from one party to another shall be in writing and delivered in person or sent by mail, certified or registered, postage prepaid, to the parties hereto at the addresses set forth in this Agreement or to such other persons and addresses as either party may designate. Notice shall be deemed to have been given three (3) days after the day of mailing.
9. This Agreement is a contract made under and governed by the laws of the State of Alaska. All obligations and rights of the parties stated herein shall be in addition to, and not in limitation of, those provided by applicable law.
10. This Agreement shall be binding upon, and inure to the benefit of, the parties hereto, and their respective heirs, successors, and assigns.

11. This Agreement represents the entire agreement between the parties, and there are no other agreements, either oral or written, with respect to the subject matter of this Agreement.

This AGREEMENT has been reviewed, agreed to, and executed by the following parties:

for the **NATIVE VILLAGE OF KONGIGANAK**  
by

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Name Printed)

\_\_\_\_\_  
(Title)

for the **DENALI COMMISSION**  
by

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Name Printed)

\_\_\_\_\_  
(Title)

for the **(TO BE DETERMINED)**  
by

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Name Printed)

\_\_\_\_\_  
(Title)



## **2. SITE CONTROL DOCUMENTS**

**Site Control Opinion  
Kongiganak Power Plant Project**

As requested, I have reviewed the land status for the Kongiganak Power Plant project.

Land Status Summary

Land records were researched at the Bureau of Land Management, the State Department of Commerce and Economic Development, and the State Recording Office. Research of the State Recording Office information was conducted on line.

The proposed power plant is located within Section 32, Township 2S., Range 79W., Seward Meridian Alaska. The subject parcel is owned by Qemirtalek Coast Company, the Native Village Corporation for Kongiganak. Title was transferred from the federal government by interim conveyance no. 451, which was recorded in the Bethel Recording District at Book 33, Page 110 on October 21, 1982. The planned facility is on property that ultimately may be conveyed to the State of Alaska to hold in trust for the village under the provisions of Section 14(c)(3) of the Alaska Native Claims Settlement Act (ANCSA). The Qemirtalek Coast Company and the community are not yet in a position to accomplish the ANCSA 14(c)(3) reconveyances. Therefore, an interim lease document is commonly used to secure site control in these situations.

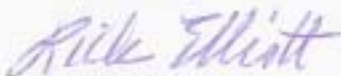
The Qemirtalek Coast Company issued an interim lease to the Kongiganak Traditional Council on January 27, 2003, for a 0.33 acre parcel described in the lease. The term of the lease is 30 years, or until the property is conveyed under ANCSA 14(c)(3). The lease was accepted by the Kongiganak Traditional Council on February 1, 2003. The lease was recorded in the Bethel Recording District on February 14, 2003, document number 2003-000299-0. A copy of the recorded lease is attached.

Site control summary

The Qemirtalek Coast Company is the owner of record of the property. The interim lease to the Kogiganak Traditional Council is, in my opinion, satisfactory evidence of site control for this project.

Disclaimer: This site control opinion does not purport to insure, warrant or certify title. The research of the Bethel Recorders Office records was limited to a review of the computerized files. The opinion is the result of a diligent research effort as described above.

Prepared by



Rick Elliott  
Land Consultant for LCMF, Inc  
February 27, 2003  
Attachment: Interim Lease

A  
L  
A  
S  
K  
A



CC

Return to:

Rick Elliott  
5452 Cape Sabine Dr.  
Anchorage, Ak 99516

### INTERIM LEASE

This interim lease is entered into this 27<sup>th</sup> day of JANUARY 2003, between Qemirtalek Coast Company, Inc. hereinafter called the Lessor, whose address is Post Office Box 5070, Kongiganak, Alaska 99559 and the Kongiganak Traditional Council hereinafter called the Lessee, whose address is Post Office Box 5069, Kongiganak, Alaska 99559.

The parties recognize that since the land encompassed by this lease will be used for community use or expansion, such land will eventually be reconveyed under the provisions of Section 14(c)(3) of the Alaska Native Claims Settlement Act. The purpose of this lease is to serve as an interim measure until such reconveyance takes place.

The parties agree as follows:

1. The Premises. The Lessor agrees to lease to the Lessee the exclusive right to construct, operate, and maintain a power plant and related facilities on the surface estate of the following real property which is located in the State of Alaska.  
  
The surface estate of certain land within Section 32, Township 2S., Range 79W., Seward Meridian, Bethel Recording District, 4<sup>th</sup> Judicial District and more particularly described in Appendix A attached to this lease. Containing approximately 0.33 acres. The bearings and distances shown on Appendix A are approximate and are subject to redescription upon survey and adjustments to the description as necessary to reflect as built alignments of improvements.
2. Term of Lease. The lease term shall be 30 years from the date that this lease is signed by both parties.
3. Termination Upon ANCSA Conveyance.
  - (a) When the Lessor conveys the title to the premises pursuant to Section 14(c)(3) of the Alaska Native Claims Settlement Act (ANCSA) in a manner that protects Lessee's rights to construct, operate, and maintain a power plant and related facilities on the premises, this lease shall terminate. Neither the Lessor nor the Lessee shall be entitled to compensation of any kind whatsoever due to termination of this lease pursuant to this paragraph.
  - (b) In the event that no such conveyance is accomplished during the term of this lease, the Lessee shall have sixty (60) days within which to exercise an option to renew this lease for an additional 30 year term.



4. Rent. Consideration for this lease consists of the mutual promises contained herein and the mutual benefits from Lessee's operation for the public benefit of a power plant on the premises. No rental will be charged for this lease because of mutual benefits of the project.
5. Reservation of Rights. The Lessor reserves the right to grant to others the rights and privileges to use the premises not specifically and exclusively granted to the Lessee. The rights and privileges granted to the Lessee in this lease are the only rights and privileges granted to the Lessee by this lease. The Lessee has no easements, rights or privileges, expressed or implied, other than those specifically granted by this lease.
6. Valid Existing Rights. This lease is entered into and made subject to all valid existing rights, including easements, rights-of-way, reservations, or other interests in the premises, in existence on the date the lease is entered into.
7. Encumbrance of Premises. During the term of this lease, the Lessee may not assign this lease or sublet the premises, nor enter into any lease, easement, or other obligation of the Lessor's title without the prior written approval of the Lessor. Any such act, without prior written approval of the Lessor, is void against the Lessor's title to the premises.
8. Subleases. The Lessee shall provide the Lessor with copies of all applications for subleases, assignments, proposals for development, and construction as-builts, as they become available.
9. Successors Bound. All covenants and provisions in this lease extend to and bind the legal representatives, successors, sublessees, and assigns of the parties.
10. Access to Premises. The Lessor or its authorized representatives reserve the right of ingress to and egress from the premises.
11. Operation and Maintenance. At no cost to the Lessor, the Lessee will provide all utilities, services, and maintenance necessary for the Lessee's use of the premises. The Lessee will take reasonable steps to protect the surface of the leased area and natural resources, and improvements thereon, and maintain the premises in a reasonably neat and clean condition.
12. Surface Reservation. Unless otherwise stated in this lease, the Lessee may not sell or remove for use elsewhere any of the surface resources of the premises.
13. Breach and Remedies.
  - (a) The premises are to be used only for purposes of a power plant and related facilities. The premises are to be used only for purposes related to developing and protecting the power generation system and other activities that will serve the greater good of the community of Kogiganak and for no other purpose without specific written authorization of the Lessor. The Lessor retains the right to terminate this lease upon 30 days written notice if the premises are used for unauthorized purposes.



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- (b) Time is of the essence in this lease. If the Lessee breaches any provision of this lease, other than a breach for improper use of the premises which is governed by subparagraph (a), and the breach is not remedied within 30 days after written notice of it has been served on the Lessee, the Lessee is subject to any legal action that the Lessor considers appropriate, including the termination of this lease. The Lessor is not liable for any expenditures made by the Lessee in the event of the termination of this lease.
  - (c) If this lease is terminated by summary proceeding or in any other manner, or if the premises or any part of it is abandoned by the Lessee during the term of this lease, the Lessor, after written notice to the Lessee, may immediately, or at any time afterwards, enter or re-enter and take possession of the premises, or any part of it, without liability for any damage, and may remove all persons and property from it either by summary proceeding or by legal action. The words "entry" and "re-entry" are not restricted to their technical legal meaning.
14. No waiver. The failure of the Lessor to insist on any one or more instance upon the strict performance by the other party of any provision in this lease may not be considered as a waiver for the future; the provision will continue in full force.
15. Indemnity of Lessor. The Lessee shall indemnify and hold the Lessor harmless from:
- (a) all claims and demands for loss or damage, including property damage, personal injury, wrongful death, and wage or employment claims, arising out of or in connection with the use or occupancy of the premises by the Lessee or his successor, or at his invitation; and
  - (b) any accident or fire on the premises resulting from use or occupancy of the premises by Lessee, its successors, or its invitees; and
  - (c) any nuisance on the premises; and
  - (d) any failure of the Lessee to keep the premises in a safe and lawful condition consistent with applicable laws, regulations, ordinances, or orders; and
  - (e) any assignment, sublease, or conveyance, attempted or successful, by the Lessee which is contrary to the provisions of this lease.

The Lessee will keep all goods, materials, furniture, fixtures, equipment, machinery, and other property on the premises at his sole risk, and will hold the Lessor harmless from any claim of loss or damage to them by any cause.

16. Notice of Claim. The parties agree to immediately notify each other of any claim, demand, or lawsuit arising out of or affecting the Lessee's occupation or use of the premises. Both



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parties will fully cooperate in the investigation and litigation of any claim, demand, or lawsuit affecting the premises.

17. Laws and Taxes. At no expense to the Lessor, the Lessee will conduct all activities authorized by this lease in compliance with all Federal, State, and local laws, ordinances, rules and regulations now or hereafter in force, which apply to the activities authorized herein or to the use, care, operation, maintenance, and protection of the facilities, including but not limited to matters of health, safety, sanitation, and pollution. The acquisition of any necessary licenses or permits and payment of any taxes and special assessments accruing against the premises during this lease term will be the responsibility of the Lessee or its sublessees and not that of the Lessor.
18. Notices. All notices and other writings required or permitted by this lease must be sent by registered or certified mail, postage prepaid, to the parties at the following addresses. A party must notify the other in writing of any change in address.

Lessor: Qemirtalek Coast Corporation  
Post Office Box 5070  
Kongiganak, AK 99559

Lessee: Kongiganak Traditional Council  
Post Office Box 5069  
Kongiganak, AK 99559

19. Denial of Warranty Concerning Title or Conditions. The Lessor make no specific warranties, expressed or implied, concerning the title or condition of the premises, including survey, access, or suitability for any use, including those uses authorized by this lease. The Lessee leases the premises subject to any and all of the covenants, terms, and conditions affecting the Lessor's title to the premises.
20. Integration and Modification. This lease, including all documents, which by reference are incorporated in it or made a part of it, contains the entire agreement between the parties. This lease may not be modified or amended except by a document signed by both parties to this lease. Any amendment or modification, which is not in writing and signed by both parties, is of no legal effect.
21. Severability of Clauses of Lease. If any provision of this lease is adjudged to be invalid, that judgment does not affect the validity of any other provision of this lease, nor does it constitute any cause of action in favor of either party as against the other.
22. Headings. The heading of the numbered paragraphs in this lease shall not be considered in construing any provision of this lease.

BY SIGNING THIS LEASE, the Lessor and the Lessee, agree to be bound by its provision as set out above.



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2003-000299-0

Attachments

Appendix A: Property Plan

Appendix A-1: Corporate resolution authorizing signing

Appendix A-2: Council resolution authorizing signing

Lessor:

Qumirtalek Coast Corporation  
Kongiganak, AK 99559

By: William [Signature] QCC  
Board Chairman

ACKNOWLEDGMENT

STATE OF ALASKA )

4<sup>th</sup> JUDICIAL DISTRICT )

ss.

This is to certify that on Feb 1, 2003, before me appeared  
William [Signature], known by me to be the Chairman, of  
Qumirtalek, who is authorized to sign this lease as shown by the attached  
resolution (Appendix A), and who executed this lease and acknowledged voluntarily signing it on  
behalf of Qumirtalek as Lessor.

(SEAL)

Ireda Beaver

Notary Public in and for the State of Alaska

My commission expires: N/A



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Lessee:

KONGIGANAK TRADITIONAL COUNCIL  
KONGIGANAK, AK 99559

Tommy Phillipson

ACKNOWLEDGMENT

STATE OF ALASKA )  
 )  
4th JUDICIAL DISTRICT ) ss.

This is to certify that on Feb 1, 2003, before me appeared  
Tommy Phillipson, known by me to be the President, of  
Kongiganak Traditional, who is authorized to sign this lease as shown by the attached  
resolution (Appendix A), and who executed this lease and acknowledged voluntarily signing it on  
behalf of Kongiganak as Lessee.

(SEAL)

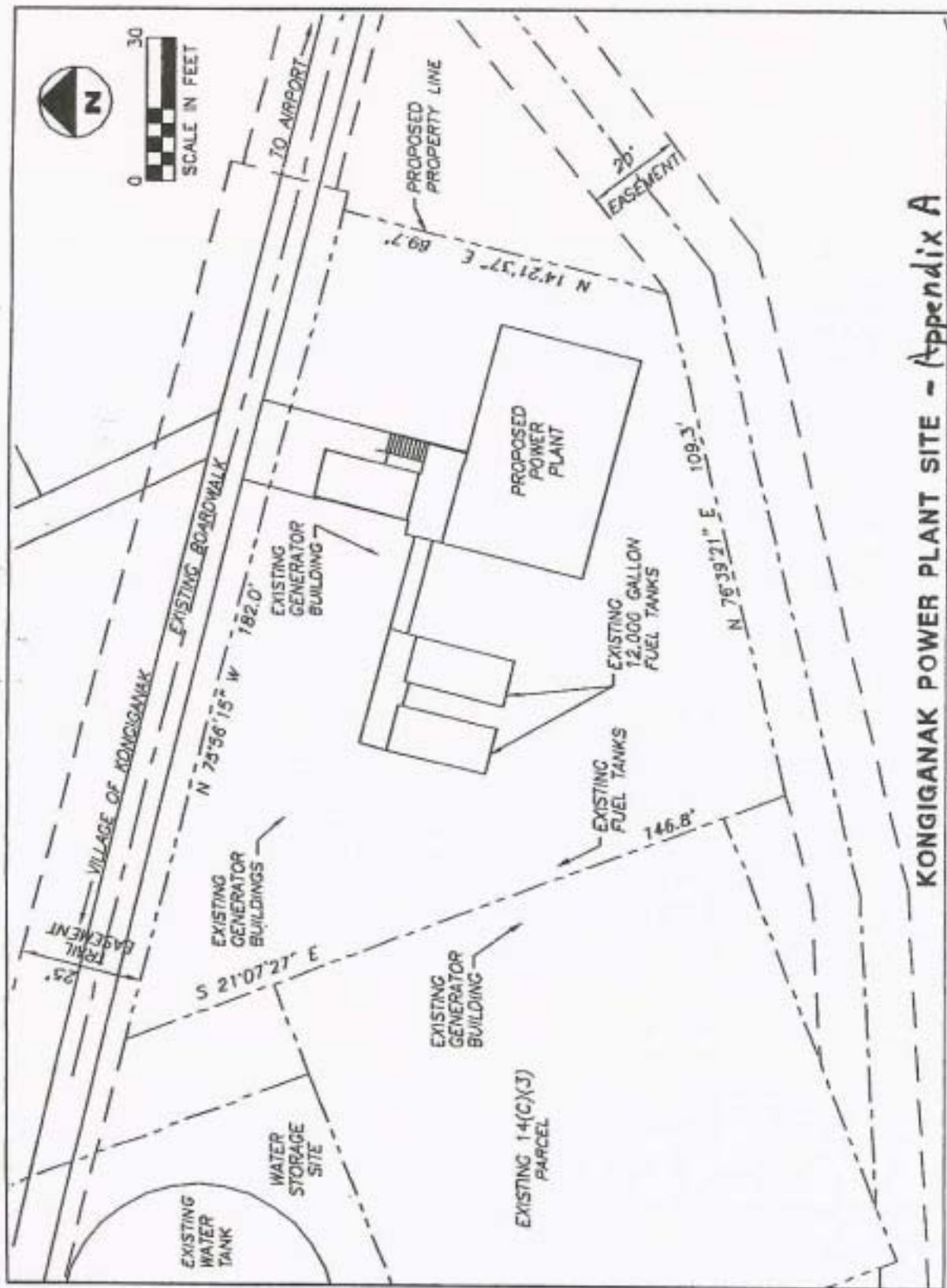
Freda Beaver  
Notary Public in and for the State of Alaska  
My commission expires: N/A



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# KONGIGANAK POWER PLANT SITE - Appendix A



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2003-000299-0

**QEMIRTALEK COAST CORPORATION**

**BOARD RESOLUTION NO. 2003-01-27**

WHEREAS, the Qemirtalek Coast Corporation (hereinafter as Corporation) is the Native Village corporation for Kongiganak, having incorporated and organized in accordance with Section 8 of the Alaska Native Claims Settlement Act (hereinafter as ANCSA) and the laws of the State of Alaska; and

WHEREAS, the Corporation is required to transfer land for community use and expansion pursuant to Section 14(c)(3) of ANCSA to a municipal corporation or to the State in trust for a future municipal corporation; and

WHEREAS, the Corporation is not yet prepared to begin the 14(c)(3) reconveyance process; and

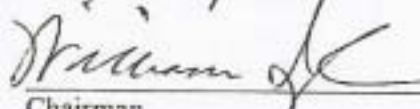
WHEREAS, the Kongiganak Traditional Council needs to secure an interest in land in order to meet site control requirements for a community project; and

WHEREAS, the Corporation Board has reviewed this proposed lease which will serve as an interim measure until 14(c) reconveyances can be accomplished; and

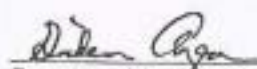
WHEREAS, the Corporation Board believes the best interests of the Corporation would be served by issuing this lease.

NOW THEREFORE BE IT RESOLVED that the Board of Directors of the Corporation approves the attached lease, and that the Chairman of the Corporation is hereby authorized and empowered to sign said lease on behalf of the Corporation.

ADOPTED AND DATED this 27 day of January, 2003 at  
Kongiganak, Alaska.

  
Chairman

ATTEST:

  
Secretary/Treasurer



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2003-000289-0

CERTIFICATE

The Undersigned, Gideon Arzon, Secretary of Qanachuk Coast Corp., an Alaska Corporation, does hereby certify that at a meeting of the Board of Directors of said Corporation duly called and held on the 27th day of January, 2003 at which a quorum was at all times present and voting, the foregoing resolution was duly adopted.

Dated this 27th day of January, 2003, at Kongsigruk, Alaska.

(Corporation Seal)

by: Gideon Arzon  
its Secretary

APPENDIX A-1

  
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**NATIVE VILLAGE OF KONGIGANK  
KONGIGANAK TRADITIONAL COUNCIL  
P.O. BOX 5069  
KONGIGANAK, ALASKA 99559**

**RESOLUTION 02-12-02**

**TITLE: APPROVAL OF POWER PLANT PROJECT SITE CONTROL DOCUMENT  
AND AUTHORIZING THE PRESIDENT TO SIGN THE DOCUMENTS**

**WHEREAS**, the Native Village of Kongiganak is a federally recognized tribe; and

**WHEREAS**, the Kongiganak Traditional Council (Council) is the governing body for the tribe;  
and

**WHEREAS**, the Council needs to secure an interest in land in order to meet site control  
requirements for a community project; and

**WHEREAS**, the Council has reviewed this proposed lease which will serve as an interim  
measure until 14(c) reconveyances can be accomplished; and

**WHEREAS**, the Council believes the best interests of the tribe would be served by issuing this  
lease. So


**NOW THEREFORE BE IT RESOLVED** that the Kongiganak Traditional Council approves  
the attached lease, and that the Council President is hereby authorized and empowered to sign  
said lease on behalf of the Council

**CERTIFICATION**

This resolution was passed and approved by the Kongiganak Traditional Council on this 22<sup>nd</sup> day  
of December, 2002 of which a quorum was present, with a vote of 4 yes; and  
0 no; and 0 abstaining.

  
\_\_\_\_\_  
President

ATTEST:

  
\_\_\_\_\_  
Secretary



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2003-000299-0

### **3. GRANT AGREEMENT**

**State of Alaska  
Alaska Energy Authority**



**Grant Agreement**

Grant Agreement Number 2195129		Amount of Funds \$210,000	
Collocation Code(s) 8010165	Encumbrance Number/AR	Project Title Kongiganak Power Plant & Distribution System Upgrade	
<b>Grantee</b>		<b>Authority Contact Person</b>	
Name Native Village of Kongiganak		Name Kris Noonan	
Street/PO Box P.O. Box 5069		Title Project Manager	
City/State/Zip Kongiganak, Alaska 99559		Street/PO Box 813 W. Northern Lights Blvd	
Contact Person Tommy Phillip, Sr., President		City/State/Zip Anchorage, AK 99503	
Phone 907- 557-5226	Fax 907-557-5224	Phone 907-269-4697	Fax 907-269-3044

**AGREEMENT**

The Alaska Energy Authority (hereinafter 'Authority') and the Native Village of Kongiganak (hereinafter 'Grantee') agree as set forth herein.

**Section I.** The Authority shall grant to the Grantee funds for the construction of the Project and performance of the Project work under the terms outlined in this agreement. The Authority shall grant funds to pay for expenses incurred by the Grantee that are authorized under this Agreement, in an amount not to exceed \$210,000, unless the grant amount is amended as provided herein.

**Section II.** The Grantee shall apply the grant funds to the construction of the Project and perform all of the work and other obligations required by this Agreement.

**Section III.** Performance under this agreement begins upon signature by the Authority's Executive Director and shall be completed no later than December 31, 2003.

**Section IV.** The agreement consists of this page and the following:

**ATTACHMENTS**

Article A: Definitions  
Article B: Special Provisions  
Article C: General Provisions

**APPENDICES**

Appendix 1: Notice of Project Completion  
Appendix 2: Funding Sources  
Appendix 3: In-Kind Contributions  
Appendix 4: Waiver of Sovereign Immunity

AMENDMENTS: Any fully executed amendments to this Agreement

<b>Grantee</b>	<b>Authority</b>
Signature	Signature
Printed Name and Title Tommy Phillip, Sr., President	Printed Name and Title Robert Poe, Jr. Executive Director
Date	Date

## **ARTICLE A.DEFINITIONS**

In this Grant Agreement:

- a) "Authority" means the Alaska Energy Authority, a public corporation of the State of Alaska. The Authority is herein charged with the role and responsibility as both the Grantor and as an agent of the Grantee.
- b) "Denali Commission" means the federal-state commission established under 42 USC 3121 and its successors or assigns.
- c) "Executive Director" means the Executive Director of the Authority or authorized designee.
- d) "Grantee" means the Native Village of Kongiganak.
- e) "Grantor" means the Alaska Energy Authority.
- f) "Project" means the Kongiganak Power Plant & Distribution System Upgrade Project.
- g) "Procurement Manager" means the employee of the Authority who determines disputes as provided in Article C. Section 3.
- h) "State" means the State of Alaska.
- i) "Project Manager" means the employee of the Authority in charge of the Project.
- j) "Design Documents" are the technical documents and drawings specifying how the Project is constructed.
- k) "Construction Manager" means the on-site supervisor of the Project as assigned by the Authority. The Construction Manager may or may not be an employee of the Authority.
- l) "Substantial Completion" means the Project is ready for beneficial occupancy by the Participant(s). At the point of Substantial Completion the work may not be complete, and the Grant may not be closed.
- m) "Project Completion" means the Project is complete, the work is complete, and all Project costs have been billed and paid as determined by the Authority.
- n) "Grants Manager" means the employee of the Authority in charge of managing the Grant.

## **ARTICLE B. SPECIAL PROVISIONS**

Subject to appropriation and availability of funds, the Authority agrees to grant to the Grantee the amounts stated herein, and the Grantee agrees to expend grant funds only for eligible costs to perform the Scope of Work stated herein.

### **Section 1. Description of Project and Scope of Work.**

This grant provides funding to be used for the design and construction of a new code compliant prime power production facility and distribution system upgrades in Kongiganak, Alaska, as described more fully in the Conceptual Design Report dated January 15, 2002, the Business Operating Plan (draft) dated February 18, 2002 which is attached hereto, and detailed design documents and specifications to be prepared by the Authority.

### **Section 2. Project Funding Sources.**

This Grant is subject to appropriation and availability from the sources of funding listed in Appendix 2. The Authority may redesignate the sources and the amount of the total Grant funding shown in Appendix 2.

If the Project costs exceed the Grant funds and if additional funds are available to perform the work described in this Agreement, the Authority may grant additional funds to the Grantee to perform this work by issuing and providing to the Grantee an amended Appendix 3 showing the amended grant amount. Grantee acknowledges that such a grant of additional funds will be pursuant to the terms and conditions of this Agreement, and acknowledges that by accepting the grant funds and the grant-funded Project work it is accepting them subject to the terms and conditions of this Agreement.

### **Section 3. Grant Disbursements.**

- a) The Authority will disburse grant funds as eligible costs are incurred.
- b) The Authority may engage an accounting firm (Trustee) to provide Project related services. If engaged, the Trustee may receive and disburse a portion of Grant funds to cover various project costs which may include payroll and related obligations, including taxes and workers compensation insurance, and other selected project costs as the Authority directs. If engaged, the Trustee may be used to prepare quarterly and annual payroll tax reports for the IRS and the State of Alaska, Department of Labor, as applicable, and W-2 Forms for the Project employees. If engaged, the Trustee will submit such reports and pertinent checks to the appropriate federal and state offices.



If the Authority retains the services of the Trustee, the Authority will be the liaison between the Grantee and the Trustee. The Authority will follow the procurement regulations specified by the funding sources.

- c) The Authority, as agent for the Grantee, will account for and disburse selected Grant funds for any Project costs not covered under (b) of this section in accordance with the funding sources referenced in Appendix 3. The Authority as agent for the Grantee will disperse Grant funds as required by the funding sources.
- d) Upon Project Completion:
  - 1. any Grant funds not expended under this agreement and any interest accruing on the grant funds belong to the Authority and shall be returned to the Authority;
  - 2. the Authority may apply to other projects any other grant monies authorized for the Project but not expended or obligated under this agreement.

#### **Section 4. Eligible Costs Under This Grant.**

- a) The Authority, as Grantor, shall have sole discretion to determine which project costs are eligible to be paid for from Grant monies under this agreement. No work shall be performed or initiated without the prior approval from the Authority. Upon approval by the Authority, the following necessary reasonable, actual expenses associated with the design and construction of the Project are eligible for payment or reimbursement from grant funds:
  - 1. Payroll Costs. Payroll costs are comprised of wages paid to Grantee personnel for time worked directly on the Project, plus payroll taxes and insurance, as well as vacation, holiday, sick leave and retirement benefits, if any.
  - 2. Direct Non-Salary Costs. These costs must be directly attributable to the Project and shall include the following:
    - i. The costs associated with consultants, inspectors, surveyors, contractors, subcontractors, and other services required to design and construct the Project.
    - ii. The cost of materials, supplies and freight purchased by, or on behalf of, the Grantee and used in the construction of the Project.
    - iii. The Grantee's costs of reproducing plans, specifications, maps, reports, and other documents.
    - iv. The cost of long distance communication and other utilities needed for construction.
    - v. Purchase or rental of small equipment or tools needed in the construction of the Project.
    - vi. Insurance covering the Grantee and the Authority.

3. The Authority may pay for costs not specifically listed in this section from Grant monies, if in the determination of the Authority the costs are necessary.
- b) Costs not in listed in subsection a) of this section or not deemed eligible by the Authority under a), 3) of this section are not eligible to be paid for from money granted under this agreement.

### **Section 5. Authority as Grantee's Agent.**

- a) The Authority will serve as the Grantee's agent for the design and construction management of the Project, including, but not limited to, where applicable, issuing Invitations to Bid and selecting contractors. The Authority will be responsible for all matters related to the Project design and construction, including, but not limited to: approval of plans and specifications; choices of scheduling, manpower, and methods; procedures for administering the Project; procurement of materials; insurance during construction; disposition of surplus equipment; payment of all Project billings; complying with all federal reporting requirements (except as provided in Article C section 12 or elsewhere herein); performance of final project inspection; and issuance of a Notice of Project Completion. Permitting and other items specified herein are the responsibility of the Grantee. The Construction Manager, who serves as an on-site representative of the Authority, has the right to hire and fire, and establish wage rates and work hours of Project employees.

The Authority shall not be responsible for environmental investigation or remediation of the existing power plant facilities or properties, or for any other environmental matters. In addition, the Authority will not be responsible for the removal and decommission of any existing facilities.

- b) If the funding sources for the Project include Indian Community Development Block Grant monies or Community Development Block Grant monies granted to the Grantee, the Authority may enter into a Grant Management Agreement with the Grantee in relation to some or all of those monies. If such agreement is entered into, the Authority may have additional duties as the agent of the Grantee as outlined in those Agreements which will be attached as an appendix hereto.

### **Section 6. Grantee's Responsibilities**

- a) Prior to the start of construction, the Grantee will agree to a Business Operating Plan for the electric utility, in a form and with terms approved by the Denali Commission. The Business Operating Plan will identify the major cost components necessary for the operations, maintenance, and long term sustainability of the Project and will include a business plan for funding those costs. If required by the Denali Commission, the Grantee also will enter into a Secondary Operator Agreement with the Denali Commission, which incorporates by reference Grantee's responsibilities contained in the Business Operating Plan. If required by the Denali Commission or the Authority, the Grantee also will enter into a lease agreement(s) for the premises on which the project is located, in a form and with terms approved by the Denali Commission or the Authority.

- b) The Grantee is responsible for securing the real property interests necessary for the construction and operation of the Project, through ownership, leasehold, easement, or otherwise as addressed in the Business Operating Plan. The Grantee also is responsible for obtaining the required permits and approvals. These permits may include, but are not limited to, Corps of Engineers' Wetlands Permit, State Fire Marshal approval, rights-of-way for the pipelines, and site control, including any necessary Coastal Zone Management coordination through the Division of Governmental Coordination (DGC). The Authority will assist the Grantee in obtaining these permits and approvals.
- c) The Grantee will assist the Authority in obtaining qualified local labor for the Project and will provide necessary local administration assistance, including recommending qualified local personnel; assisting in obtaining necessary personnel information; assisting in obtaining housing for nonresident workers; facilitating communications between the Authority, the community and local employees; and serving as a liaison between the Authority and the community.
- d) The Grantee will provide, as an in-kind contribution, local equipment (excluding operator, fuel and maintenance) and tools as available to support the Project, and the contribution specified in Appendix 3. The Grantee will not be paid for its contributions of the use of equipment, tools, supplies, materials, or its contributions of services except as agreed to in writing by the Authority. The Authority requires in-kind contributions to demonstrate that the grantee and the community are committed to and invested in the proposed project. The specific details of in-kind contributions from the grantee or the community will be laid out in the final grant agreement. Typical in-kind contributions include, but are not limited to: land for the Power Plant, the use of heavy equipment as available, lodging, etc. The Authority encourages the grantee and the community to support this project with in-kind contributions to the greatest extent possible.
- e) The Grantee is responsible for obtaining training as outlined in the Business Operating Plan (see section 6a above).
- f) The Grantee is responsible for reviewing project documents and monitoring the Project work to the extent necessary for Grantee to determine that the work is proceeding satisfactorily and to undertake its responsibilities described in the Business Operating Plan. The Grantee will promptly raise with the Authority any concerns or issues it may have regarding the Project, and if those concerns or issues are not satisfactorily resolved will promptly give written notice with a detailed description of the concerns or issues to the Authority's contact designated in Article C, section 19.

## **Section 7. Substantial Completion.**

Upon substantial completion of the Project, as defined herein, the Authority will issue a Certificate of Substantial Completion per Section V of the Business Operating Plan. When this Certificate is issued, the Primary Operator assumes all responsibility associated with operating and maintaining the Project. Failure by the Grantee to provide to the Authority a written description of remaining work within 15 days of delivery of the Certificate constitutes acceptance of the Certificate and the Project.

## **Section 8. Project Completion Notice.**

The Grantee shall sign the Notice of Project Completion located at Appendix 1 within 15 days after it is delivered by the Authority. Upon receipt of the signed signature page, the Authority will close the Grant. The Grant will automatically be closed if the Grantee fails to return the Notice of Project Completion within 30 days after it is delivered by the Authority.

## **Section 9. Power Cost Equalization.**

The Grantee agrees that it will not include the value of services received under this grant as operating expenses under the Power Cost Equalization Program or as operating expenses in making rates for the utility receiving services.

## **Section 10. Grantee Responsibilities After Project Completion.**

- a) The Grantee will not sell, transfer, encumber, or dispose of any of its interest in the facilities constructed with this grant funding during the economic life of the Project without prior written Authority approval.
- b) The Grantee agrees that upon completion of the Project it will be responsible for and will perform those activities and functions required of it in the Business Operating Plan, and, if applicable to this project, the Secondary Operator Agreement. See Section B.6.a above. These responsibilities may not be altered or transferred without the prior written approval of the Denali Commission.

## **ARTICLE C. GENERAL PROVISIONS**

### **Section 1. Inspection and Retention of Records.**

The Grantee shall allow the Authority or its designees to examine all Project related records at any reasonable time for the purpose of copying, audit or inspection. The Grantee shall ensure that the Authority, its contractors and consultants, and any Secondary Operators have reasonable access to Project facilities during construction of the Project, and reasonable access for performance analysis and testing over the life of Project facilities for no cost. The Grantee shall retain all Project related records for four years following the completion date of the Project or until final resolution of any audit, negotiation, claim or other action related to the Project which is started prior to the end of the four year period, whichever is later.

### **Section 2. State and Authority held harmless.**

As a condition of this Grant, the Grantee agrees to defend, indemnify, and hold harmless the Authority and the State of Alaska, and their agents, servants, contractors, and employees, from and against any and all claims, demands, causes of action, actions, and liabilities arising out of, or in any way connected with this grant or the project for which the grant is made, howsoever caused, except to the extent that such claims, demands, causes of action, actions or liabilities are the proximate result of the sole negligence or willful misconduct of the Authority or the State of Alaska.

### **Section 3. Disputes.**

- a) The parties agree that any dispute arising out of this agreement which cannot be resolved by mutual agreement shall be addressed as set forth in this Section. It is further agreed and understood that compliance with this Section shall be a condition precedent to bringing or filing an action or court proceeding for determination of any dispute. The intent of the dispute process set forth in this Section is to facilitate the timely resolution of disputes arising from or out of this agreement.
- b) Disputes which cannot be resolved by agreement shall be decided by the Procurement Manager. The decision shall be in writing and be made not more than 60 days after receipt by the Procurement Manager of all appropriate information (as determined by the Procurement Manager) from the Grantee. Failure of the Grantee to furnish appropriate information (as determined by the Procurement Manager) to the Procurement Manager within 21 days of the receipt of the Procurement Manager's request constitutes a waiver of the Grantee's claim.
- c) The time for issuing the Procurement Manager's decision may be extended for good cause by the Executive Director. The Procurement Manager shall notify the Grantee in writing that the time for the issuance of a decision has been extended and of the date by which a decision shall be issued. The Procurement Manager shall furnish a copy of the decision to the Grantee by certified mail or other method that provides evidence of receipt. Pending a final decision, the Grantee shall proceed with diligent

performance of the agreement in accordance with the Procurement Manager's decision notwithstanding any disagreement with that decision.

- d) The Procurement Manager's decision is final unless, within 30 days of receipt of the decision, the Grantee delivers a Notice of Appeal to the office of the Executive Director. The Grantee shall provide a copy of the appeal to the Procurement Manager.
- e) The appeal must contain a copy of the decision being appealed and identification of the factual or legal errors in the decision that form the basis for the appeal. General assertions that the Procurement Manager's decision is contrary to law or facts are not sufficient.
- f) Except as provided in subsection (g) of this section, a hearing on an appeal to the Executive Director shall be conducted according to the procedures set out in (h) of this article.
- g) Within 15 days after receipt of an appeal on a dispute, the Executive Director may adopt the decision of the Procurement Manager as the final decision without a hearing, if the Executive Director determines that there are no material issues of fact.
- h) The Executive Director may act as the hearing officer and upon hearing the evidence, render findings of fact and conclusions of law, or the Executive Director may appoint an impartial hearing officer to conduct the hearing.
- i) The hearing officer shall arrange for a prompt hearing and notify the parties in writing of the time and place. The hearing will be conducted in an informal manner and will be held in Anchorage, Alaska. Participants outside Anchorage may attend by phone. The hearing officer may conduct the hearing as set forth in AS 36.30.670(b), which is incorporated herein by reference.
- j) If the Executive Director is not acting as the hearing officer, the hearing officer shall recommend a decision to the Executive Director based on the evidence presented. The recommendation must include findings of fact and conclusions of law. The Executive Director may affirm, modify, or reject the hearing officer's recommendations in whole or in part, may remand the matter to the hearing officer with instructions, or take other appropriate action.
- k) The Executive Director's decision shall be sent within 20 days after the hearing to all parties by personal service or certified mail. The decision of the Executive Director is final and conclusive unless appealed to superior court, Third Judicial District at Anchorage within 30 days of receipt of the decision. The laws of the state of Alaska govern this agreement.

#### **Section 4. Termination.**

- a) The Grantee shall have no rights to compensation or damages for termination, except as provided in this Section.
- b) In addition to all other rights available under law, the Authority may terminate this Agreement or stop work on the Project for the convenience of the Authority or for cause upon ten (10) days written notice.
- c) "Cause" for termination shall exist when the Grantee has failed to perform under this Agreement, has provided incorrect or misleading information or has failed to provide information which would have influenced the Authority's actions. In order for termination to be for cause, the Grantee's failure to perform or the Grantee's provision of incorrect, misleading, or omitted information must be material.
- d) If this Agreement is terminated for cause, the Grantee shall be entitled to no compensation. The Grantee shall reimburse the Authority for all grant funds expended under this Agreement by the Grantee or on the Grantee's behalf including interest accrued from the date of disbursement. The Grantee shall also reimburse the Authority for any costs incurred to collect funds subject to reimbursement, and for any damages incurred by the Authority as a result of the Grantee's failure to perform or provision of incorrect or misleading information. The Authority may require the Grantee to return to the Authority some or all of the project assets if this Agreement is terminated for cause.
- e) If this Agreement is terminated at the sole request of the Authority for the sole reason of its convenience, the Grantee is not required to reimburse the Authority for funds expended prior to the date of termination. If the Grantee has incurred costs under this agreement, the Grantee shall only be reimbursed by the Authority for eligible costs the Grantee incurred prior to the date of termination of the Agreement. However, prior to making any claim or demand for such reimbursement, the Grantee shall use its best effort to reduce the amount of such reimbursement through any means legally available to it. The Authority's reimbursement to the Grantee shall be limited to the encumbered, unexpended amount of funds available under this Agreement.

#### **Section 5. Sovereign Immunity.**

By execution of this grant agreement, the Grantee irrevocably waives any sovereign immunity which it may possess, and consents to suit against itself or its officials, under the laws of the State of Alaska, in the courts of the State of Alaska as to all causes of action by the Authority arising out of or in connection with this agreement. If the Grantee is an entity which possesses sovereign immunity, it shall provide the Authority with a resolution of the Grantee's governing body waiving sovereign immunity, and such resolution shall be incorporated into this agreement as an Appendix.

## **Section 6. Binding Effect.**

This Agreement and all of its terms, covenants, conditions and appendices represent the entire Agreement of the parties and shall extend to and be binding upon the respective heirs, executors, administrators, grantees, successors and assigns of the parties to this Agreement.

## **Section 7. No Assignment or Delegation.**

Unless otherwise allowed by this Agreement or in writing by the Authority, any assignment by the Grantee of its interest in any part of this Agreement or any delegation of its duties under this Agreement without such approval shall be void.

## **Section 8. Grantee Shall Not Act as an Agent of the Authority.**

The Grantee, its officers, agents, servants and employees shall act in an independent capacity and not as agents of the Authority in the performance of this Agreement.

## **Section 9. Rights of Other Parties.**

The parties agree that no person is a third party beneficiary of this Agreement and this Agreement creates no third party rights. Specifically, any person who is not a party to this Agreement shall be precluded from bringing any action asserting the liability of a party or asserting any right against a party to this Agreement, through the terms of this Agreement. No person, other than a party to this Agreement, may bring any action based upon this Agreement for personal injuries, property damages, or otherwise.

## **Section 10. Compliance with Applicable Law and Funding Source Requirements.**

The Grantee shall comply with all applicable local, state and federal statutes, regulations, ordinances and codes, whether or not specifically mentioned herein including, but not limited to: the Americans with Disabilities Act (ADA) of 1990; Equal Employment Opportunity Executive Orders; Copeland Anti-Kickback Act; Davis-Bacon Act; Contract Work Hours and Safety Standards Act; Clean Air and Clean Water Act; and 15 C.F.R. Part 24. The Grantee agrees to comply with all applicable grant terms and conditions imposed by the Denali Commission and any other funding sources.

## **Section 11. Audit Requirements.**

The Grantee agrees that it will be bound by any audit requirements that may apply to this agreement including 2 AAC 45.010 commonly referred to as the "Single Audit Regulation" and any applicable federal audit requirements. The Grantee acknowledges that it is responsible for compliance with federal and state single audit requirements and all other applicable audit requirements, and agrees to obtain all required audits.



## **Section 12. Severability.**

If any section, paragraph, clause or provision of this Agreement or any agreement referred to in this Agreement shall be finally adjudicated by a court of competent jurisdiction to be invalid or unenforceable, the remainder of this Agreement shall be unaffected by such adjudication and all the remaining provisions of this Agreement shall remain in full force and effect as if such section, paragraph, clause or provision or any part thereof so adjudicated to be invalid had not been included herein.

## **Section 13. Declaration of Public Benefit.**

The parties acknowledge and agree that the Project shall be constructed, owned and operated for the benefit of the general public and will not deny any person use and/or benefit of Project facilities due to race, religion, color, sex, marital status, age or national origin.

## **Section 14. Nonwaiver.**

The failure of either party at any time to enforce a provision of this Agreement shall in no way constitute a waiver of the provision, nor in any way affect the validity of this Agreement, or any part hereof, or the right of such party thereafter to enforce each and every provision hereof.

## **Section 15. Amendment.**

This Agreement may only be modified or amended in writing, executed by the authorized representatives of the parties with the same formality as this Agreement was executed. For the purpose of any amendment, modification or change to the terms and conditions of this Agreement, the authorized representatives are the Executive Director of the Authority or designee, and the President of the Grantee or written designee of record.

## **Section 16. Integration.**

This instrument and all appendices, amendments, and attachments hereto embody the entire Agreement of the parties concerning the grant funds granted hereunder. There are no promises, terms, conditions, or obligations regarding said funds other than those contained in the documents described above; and such documents shall supersede all previous communications, representations or agreements, either oral or written, between the parties hereto.

## **Section 17. Applicable Law.**

This Agreement is to be construed according to the laws of the State of Alaska. Any civil action arising from this Agreement shall be brought in the Superior Court for the Third Judicial District of the State of Alaska at Anchorage.

## **Section 18. Notices.**

Any notice required of either party shall be in writing and, unless proof of receipt of such notice is expressly required by another term of this Agreement, shall be deemed served when deposited in the mail in a sealed envelope, with sufficient first class postage affixed, and addressed to the appropriate party. The notices shall be sent to each party's place of business, which in the case of the Authority shall be:

Deputy Director, Rural Energy  
Alaska Energy Authority  
813 West Northern Lights Boulevard  
Anchorage, Alaska 99503  
Phone 907-269-3000  
Fax 907-269-3044

and in the case of the Grantee shall be:

Tommy Phillip, Sr., President  
Native Village of Kongiganak  
P.O. Box 5069  
Kongiganak, Alaska 99559  
Phone 907-557-5226  
Fax 907-557-5224

## Appendix 1

### NOTICE OF PROJECT COMPLETION

#### ALASKA ENERGY AUTHORITY

Date: \_\_\_\_\_

Project Name Kongiganak Power Plant & Distribution System Upgrade Project

Contracting Party Native Village of Kongiganak

Authority Contract No. 2195129

Agreement Execution Date \_\_\_\_\_

The ALASKA ENERGY AUTHORITY certifies and acknowledges that the Project referenced above has been completed, and that all tasks have been satisfactorily carried out in accordance with the terms and conditions of Agreement No. 2195129.

\_\_\_\_\_  
Project Manager  
Alaska Energy Authority

\_\_\_\_\_  
Date

The Native Village of Kongiganak certifies that the Project named above is complete in accordance with the terms and conditions of Authority Agreement No. 2195129.

The Native Village of Kongiganak acknowledges and certifies that all expenses incurred by the Village under the Agreement have been paid in full. The Village further acknowledges that it can make no further claims for reimbursement.

---

Authorized Signature

---

(Title)

---

(Name Printed)

---

Date

## Appendix 2

### FUNDING SOURCES AND TOTAL PROJECT BUDGET

Denali Commission		<u>\$210,000.00</u>
Community Code 8010165	Total AEA Grant	<u>\$210,000.00</u>

(As of the date of Grant Implementation, only \$210,000 in material purchase has been approved by the Denali Commission. It is anticipated that upon execution of the Business Operating Plan, the full Project Budget will be approved, in an amount to be determined.)

## **Appendix 3**

### **GRANTEE IN KIND CONTRIBUTIONS TO THE PROJECT**

The Grantee will provide, at no cost to the project the following:

(To be inserted)

## **Appendix 4**

### **WAIVER OF SOVEREIGN IMMUNITY**

**RESOLUTION NUMBER\_\_\_\_\_**

A RESOLUTION OF THE NATIVE VILLAGE OF KONGIGANAK accepting State of Alaska, Alaska Energy Authority Grant number 2195129 for the Kongiganak Power Plant & Distribution System Upgrade Project and waiving sovereign immunity from suit for actions arising out of, or in connection with, the Grant.

WHEREAS, the Authority requires as a condition of the Grant that the Native Village of Kongiganak irrevocably waive any sovereign immunity which it may possess, and consent to suit against itself or its officials as to all causes of action arising out of or in connection with the Grant Agreement;

NOW THEREFORE BE IT RESOLVED THAT:

1. THE NATIVE VILLAGE OF KONGIGANAK (NVK) hereby consents to suit by the State of Alaska against NVK and its officials in state court, federal court or in administrative proceedings with respect to any disputes, claims or causes of action (including without limitation enforcement or injunctive relief) arising out of or in connection with Grant Agreement 2195129, the contractual duties assumed by NVK under that agreement, or the operation of the facility following construction.
2. NVK hereby consents to levy, execution, or garnishment against NVK's real and personal property, however held and wherever located, for any judgment or order entered in any lawsuit or administrative proceeding related to or arising out of Grant Agreement 2195129, the contractual duties assumed by NVK under that agreement, or the operation of the facility following construction, including, but not limited to, awards of attorneys fees and costs entered by any court.
3. NVK consents to the assertion by the State of any defenses, cross-claims, or counterclaims in any civil action that is filed by NVK against the state.
4. With respect to a claim or action by a force account employee or other employee of NVK arising out of or in connection with Grant Agreement 2195129, the contractual duties assumed by NVK under that agreement, or the operation of the facility following construction, NVK waives sovereign immunity to the extent of, and to the extent necessary to secure, insurance coverage including workers compensation insurance.
5. This waiver shall in no case be deemed a waiver or consent to suit, tax, or any other charge against NVK by any party other than the State of Alaska, except as specifically provided in (4) above.
6. TOMMY PHILLIP, SR. is hereby authorized to negotiate, administer and execute on behalf of NATIVE VILLAGE OF KONGIGANAK Grant number 2195129 for the Kongiganak Power Plant & Distribution System Upgrade Project and to negotiate, execute, and administer any other documents, agreements, and contracts required under or related to the Grant Agreement including subsequent amendments.

PASSED AND APPROVED BY THE NATIVE VILLAGE OF KONGIGANAK  
On \_\_\_\_\_ 2002.

IN WITNESS THERETO:

By: SIGNATURE OF CHIEF/PRESIDENT

Signature\_\_\_\_\_Title\_\_\_\_\_

Attest: SIGNATURE OF CLERK/SECRETARY

Signature\_\_\_\_\_Title\_\_\_\_\_



### **3. R&R FUND ACCOUNT**

FIRST NATIONAL BANK ALASKA  
INVESTED ESCROW INSTRUCTIONS

\_\_\_\_\_, 2002

Account No. \_\_\_\_\_

1. The parties to this agreement are Puvurnaq Power Company ("Owner"), and First National Bank Alaska ("Invested Escrow Agent"). Owner hereby appoints First National Bank Alaska, acting through its Trust Department, as the Invested Escrow Agent for the investment and disbursement of the funds in accordance with this agreement. The First National Bank Alaska agrees to serve as Invested Escrow Agent, pursuant to the terms set forth in this agreement.
2. Monies deposited by the Owner with the Invested Escrow Agent shall be for the purpose of establishing an R&R Fund, which shall be used for replacement and repair of capital expenditure items with regard to the Owner's Rural Power System Upgrade Project, which is partially or fully funded with monies from the Denali Commission. Eligible disbursements by the Invested Escrow Agent shall include the labor, transportation, equipment rental, professional services, materials, equipment and other costs for the renewal and replacement of assets essential to the on-going sustainability of the power generation or power distribution facility, including but not limited to the following:
  - Access Roads
  - Buildings
  - Poles
  - Transformers
  - Generators
  - Radiators
  - Electrical Systems
  - Wires
  - Meter Systems
  - Pumps
  - Fencing
  - Fuel Storage Tanks
  - Fuel Distribution Systems
  - Walk Ways
  - Ground Maintenance
3. On or before \_\_\_\_\_, 2002, Owner shall deposit the sum of \$ \_\_\_\_\_ with the Invested Escrow Agent, and a like sum equal to 1/12 of the annual deposit required in the respective year, as set forth in the attached table entitled "Table B: 40 Year Renewal and Replacement Cashflow" and any revisions thereof submitted to the Invested Escrow Agent. Said deposit shall be made no later than the last day of each and every month thereafter until expiration of this Agreement, to be administered in accordance with the terms of this Agreement.

If any deposit by Owner is more than 90 days past due, the Invested Escrow Agent shall notify the Owner and the Denali Commission, or its successor. The funds shall be deposited into an interest bearing account of the Invested Escrow Agent's Trust Department. All cash held by the Invested Escrow Agent, together with all interest accrued thereon, shall constitute a fund to be known as the Kongiganak Electric Utility Upgrade R&R Invested Escrow. The fund is the property of the Owner until and unless disbursed in accordance with the term of this Agreement. The undisbursed amounts in the account may be returned to the Owner on \_\_\_\_\_, 20\_\_\_\_, unless this agreement is extended in writing.

4. Upon receipt of funds from the Owner, the Invested Escrow Agent agrees to invest the funds in short term U.S. Treasuries, U.S. Agencies or in shares of the Provident T-Fund, or such other U.S. Treasury based money market funds as the Invested Escrow Agent may in its discretion elect from time to time. The interest earned on the account shall accrue for the benefit of the Owner.
5. The Owner cannot terminate this Agreement without the written consent of the Denali Commission.
6. Upon written instruction from Owner, in the form of a Request for Disbursement, which is attached as Exhibit 'A', the Invested Escrow Agent shall disburse funds to the Owner.
7. Owner consents to Invested Escrow Agent giving access to the Denali Commission or its designated agent(s) copies of all books, records, disbursement requests and correspondence related to the funds held under this agreement.
8. The Invested Escrow Agent will assess and charge the fund the fees and charges set forth in the current fee schedule which is attached hereto.
9. All notices and other communication to be given pursuant to this Agreement shall be in writing and addressed as follows:

Owner:

Puvurnaq Power Company  
P.O. Box 5009  
Kongiganak, Alaska 99569

Denali Commission:

Denali Commission  
510 L Street, Suite 410  
Anchorage, Alaska 99501

10. The Invested Escrow Agent shall have no duties not expressly provided for herein, and will not incur liability if it substantially complies with the instructions contemplated herein, using reasonable care in executing transactions, and in safekeeping the funds.

First National Bank Alaska  
Trust Department

By: \_\_\_\_\_

Date \_\_\_\_\_

Its: \_\_\_\_\_

\_\_\_\_\_

Date \_\_\_\_\_

By: \_\_\_\_\_

Its: \_\_\_\_\_

Taxpayer ID # \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## REQUEST FOR DISBURSEMENT

The undersigned, Owner of the funds in Invested Escrow Account No. \_\_\_\_\_ requests a disbursement from the account in the amount of \$ \_\_\_\_\_. The undersigned certifies that the funds will be used in accordance with Section 2 of the Invested Escrow Instructions dated \_\_\_\_\_, 20\_\_\_\_, between the undersigned and First National Bank Alaska.

Owner requests that the funds be disbursed in the following manner:

Payee	Address	Amount
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Owner:

\_\_\_\_\_ Date \_\_\_\_\_

By: \_\_\_\_\_

Its: \_\_\_\_\_

**EXHIBIT B:**  
**40 YEAR RENEWAL AND REPLACEMENT CASHFLOW**

Year	R & R Fund Balance						Assumed Collectible Kwh/Year	R&R Savings \$/Kwh
	Reg. of Year Balance	Annual Deposits	Renewals/ Replacements	Interest Earnings (Net of Fees)	End of Year Balance			
1	\$ -	\$ 7,168	\$ -	\$ -	\$ 7,168		\$ 716,760	\$ 0.010
2	\$ 7,168	\$ 7,437	\$ -	\$ 215	\$ 14,820		\$ 743,688	\$ 0.010
3	\$ 14,820	\$ 7,762	\$ -	\$ 445	\$ 23,026		\$ 776,160	\$ 0.010
4	\$ 23,026	\$ 7,765	\$ -	\$ 691	\$ 31,482		\$ 776,548	\$ 0.010
5	\$ 31,482	\$ 23,306	\$ 16,972	\$ 435	\$ 30,253		\$ 776,936	\$ 0.010
6	\$ 38,255	\$ 23,320	\$ -	\$ 1,145	\$ 62,720		\$ 777,325	\$ 0.010
7	\$ 62,720	\$ 23,331	\$ -	\$ 1,882	\$ 87,933		\$ 777,713	\$ 0.010
8	\$ 87,933	\$ 23,343	\$ -	\$ 2,638	\$ 113,914		\$ 778,102	\$ 0.010
9	\$ 113,914	\$ 23,355	\$ -	\$ 3,417	\$ 140,687		\$ 778,491	\$ 0.010
10	\$ 140,687	\$ 38,944	\$ 142,449	\$ -	\$ 37,181		\$ 778,881	\$ 0.010
11	\$ 37,181	\$ 38,964	\$ -	\$ 1,115	\$ 77,260		\$ 779,270	\$ 0.010
12	\$ 77,260	\$ 38,983	\$ -	\$ 2,318	\$ 118,561		\$ 779,660	\$ 0.010
13	\$ 118,561	\$ 39,002	\$ -	\$ 2,371	\$ 159,935		\$ 780,050	\$ 0.010
14	\$ 159,935	\$ 39,022	\$ -	\$ 3,199	\$ 202,156		\$ 780,440	\$ 0.010
15	\$ 202,156	\$ 54,658	\$ 39,352	\$ 3,276	\$ 221,758		\$ 780,830	\$ 0.010
16	\$ 221,758	\$ 54,685	\$ -	\$ 4,435	\$ 280,878		\$ 781,220	\$ 0.010
17	\$ 280,878	\$ 54,713	\$ -	\$ 5,618	\$ 341,209		\$ 781,611	\$ 0.010
18	\$ 341,209	\$ 54,740	\$ -	\$ 6,824	\$ 402,773		\$ 782,002	\$ 0.010
19	\$ 402,773	\$ 54,767	\$ -	\$ 8,055	\$ 465,596		\$ 782,393	\$ 0.010
20	\$ 465,596	\$ 54,795	\$ 466,654	\$ -	\$ 53,737		\$ 782,784	\$ 0.010
21	\$ 53,737	\$ 33,243	\$ -	\$ 1,075	\$ 90,054		\$ 783,175	\$ 0.043
22	\$ 90,054	\$ 33,693	\$ -	\$ 2,702	\$ 126,449		\$ 783,567	\$ 0.043
23	\$ 126,449	\$ 33,710	\$ -	\$ 2,529	\$ 162,689		\$ 783,959	\$ 0.043
24	\$ 162,689	\$ 33,727	\$ -	\$ 3,254	\$ 199,669		\$ 784,351	\$ 0.043
25	\$ 199,669	\$ 33,744	\$ 22,889	\$ 3,356	\$ 214,090		\$ 784,743	\$ 0.043
26	\$ 214,090	\$ 49,464	\$ -	\$ 4,282	\$ 267,836		\$ 785,135	\$ 0.063
27	\$ 267,836	\$ 49,488	\$ -	\$ 5,357	\$ 322,681		\$ 785,528	\$ 0.063
28	\$ 322,681	\$ 49,513	\$ -	\$ 6,454	\$ 378,647		\$ 785,920	\$ 0.063
29	\$ 378,647	\$ 49,538	\$ -	\$ 7,573	\$ 435,758		\$ 786,313	\$ 0.063
30	\$ 435,758	\$ 49,563	\$ 189,436	\$ 4,926	\$ 300,811		\$ 786,707	\$ 0.063
31	\$ 300,811	\$ 65,329	\$ -	\$ 6,016	\$ 372,156		\$ 787,100	\$ 0.083
32	\$ 372,156	\$ 65,362	\$ -	\$ 7,443	\$ 444,961		\$ 787,493	\$ 0.083
33	\$ 444,961	\$ 65,395	\$ -	\$ 8,899	\$ 519,255		\$ 787,887	\$ 0.083
34	\$ 519,255	\$ 65,427	\$ -	\$ 10,385	\$ 593,068		\$ 788,281	\$ 0.083
35	\$ 593,068	\$ 65,460	\$ 54,288	\$ 10,817	\$ 617,107		\$ 788,675	\$ 0.103
36	\$ 617,107	\$ 81,274	\$ -	\$ 12,942	\$ 710,723		\$ 789,070	\$ 0.103
37	\$ 710,723	\$ 81,315	\$ -	\$ 14,214	\$ 806,252		\$ 789,464	\$ 0.103
38	\$ 806,252	\$ 81,355	\$ -	\$ 16,125	\$ 903,733		\$ 789,859	\$ 0.103
39	\$ 903,733	\$ 81,396	\$ -	\$ 18,075	\$ 1,003,204		\$ 790,254	\$ 0.103
40	\$ 1,003,204	\$ 81,437	\$ 1,052,349	\$ -	\$ 3,2292		\$ 790,649	\$ 0.103

Inflation Rate :  
Reinvestment Rate :

Invested Expense Fees :

Initial Kwh Collectible :  
Initial Cost per Kwh :  
\$ year step cost increase :

## **5. INSURANCE QUOTE**

**M.J. Hall & Company, Inc**



SURPLUS LINE BROKERS  
GENERAL AGENTS

CORRESPONDENTS: LLOYDS OF LONDON

January 12, 2002

**QUOTE # 363 A**

Page 1 of 2

TO: Hagen Insurance, Inc.  
ATTN: Don Simmons

Quotation 363 A

FAX #: (907) 561-8041

FROM: Suzy Baird  
for Suzy Baird

New Business

RE: Tuluksak Native Village

POLICY PERIOD: 1/15/02 to 1/15/03

We are pleased to present the following quotation:

INSURER: Century Surety Company

COVERAGE: Commercial General Liability (CG0001 7/98 Occurrence Form)  
Commercial Property - Special Form (CP1030)

LIMITS: \$2,000,000. General Aggregate (Other than prod/comp ops)  
\$1,000,000. Products/Completed Operations Aggregate Limit  
\$1,000,000. Personal Injury and Advertising Injury Limit  
\$1,000,000. Each Occurrence Limit  
\$ 50,000. Fire Damage Limit  
\$ 2,000. Medical Expense Limit

Property Limits:

Building \$550,000. @ 90% RC

Generators \$500,000. @ 90% RC

(no coverage for the fuel tank at this time...waiting on the underwriter to see if they can cover)

DEDUCTIBLE: CGL: \$500. BI/PD Per Claim Including Loss Adjustment Expense  
Property: \$5,000.

EXCLUSIONS: EXCLUSION OR RESTRICTIVE ENDORSEMENTS:  
Amendment of Insuring Agreement-Known Injury or Damage CG0057 0999  
Employment Related Practices CG2147 0798  
Total Pollution Exclusion with a Building hosting Equipment Exception and a Hostile Fire Exception  
CG2165 0999  
Special Exclusions & Limitations CGL1701 0801 (Excludes-asbestos/lead, athletic/sports participants,  
communicable disease/diseases, criminal acts, punitive/exemplary treble damages or multipliers of  
attorneys' fees, infringement of copyright/patent/trademark or trade secret, mold/fungi/virus/bacteria/air  
quality or other contamination related loss; Amendments - Other Insurance, Premium Audit, Insured  
Contract, Employee Definition; Occurrence Definition, Personal & Advertising Definition;  
Action Over Exclusion CGL1702 1100;  
Nuclear Energy Liability Exclusion IL0021 0498;  
Abuse or Molestation Exclusion CG2146 0798;  
Exclusion-BI to Independent Contractors CGL1710;  
Exclusion-Failure to Supply (CG2250)

ATTACHMENTS:

Service of Suit CCP2010 0900;

Calculation of Premium IL0003 0498;

Alaska Changes - Attorneys Fees (IL0121);

Deductible Liability CG0300 0198;

Common Policy Conditions IL0017 1198;

Independent Contractors CGL1803 1100;



709 N. Center Street, Stockton, CA 95202  
Telephone (907) 929-5822 \* Fax (907) 929-5833





**M.J. Hall & Company, Inc**



SUPPLY LINE BROKERS  
GENERAL AGENTS

CONTRIBUTORS: LLOYDS OF LONDON

December 26, 2001

**QUOTE # 363 A**

Page 2 of 2

CONDITIONS cont..

**CONDITIONS:**

- a) Within 5 days of inception: original insured & broker signed app due.
- b) Within 5 days of inception: original of DFN & deposit due.

**PREMIUM:** \$ 2,500.00 Flat RATE: Flat Premium based on Number of Homes 75-200.  
200.00 Broker Fee - Fully retained at inception.  
72.90 State Tax  
27.00 Stamp Fee  
\$ 2,799.90 Total

**COMMISSION:** 10.00% \$500.00 deposit required to bind. Balance due in 30 days.  
**25% MINIMUM RETAINED PREMIUM IN THE EVENT OF CANCELLATION. NO FLAT CANCELLATIONS.**

**REMARKS:** For alternative villages, the premium for 0-75 homes will be \$2,000. + \$200. fee + 3.7% tax. Same terms, providing we have the same exposure.

This quotation is valid for 30 days, or until inception of coverage, whichever is sooner.

Please review this quotation carefully, as it may differ from the terms and coverages requested in your submission.



Pavunaq Power Company  
Comparable Insurance Quote

700 N. Center Street, Stockton, CA 95202  
Telephone (209) 929-5822 \* Fax (209) 929-6885

